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MUNICIPAL FUNCTIONS

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NATIONAL MUNICIPAL LEAGUE SERIES

MUNICIPAL FUNCTIONS

BY

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PREFACE

Municipal advance in a democracy can be achieved in only one way, namely, by the realization on the part of the citizenship of what should be the ideal of municipal government. For many years an increasing amount of attention has been directed to the problem of improving the form of municipal government in this country, with a view to eliminating corruption and inefficiency and making the government more representative. These are very necessary preliminaries to securing satisfactory municipal government and their importance can hardly be overemphasized. But after all, they are only preliminaries, and a campaign of education which would seek merely to formulate a demand for honest and representative government, and even for the use of trained, efficient men in administrative offices, would be incomplete. After all this has been accomplished, there has merely been laid a foundation for satisfactory municipal government. As long as public opinion and sentiment on what should be accomplished by this machinery remain uninformed, a really representative government, being representative of an electorate without clear notions of what a city should and can be expected to do, would prove aimless and unsatisfactory. No matter how progressive and enlightened an administration might be, it could not advance any farther along the path of municipal progress than the electorate was able or willing to follow and sanction. Therefore, a *sine qua non* of real municipal progress is the enlightenment of the electorate itself.

In the direction of familiarizing the public with the

standards of accomplishment by which a city government should be measured, beyond the primal matters of honesty, ability, and strict attention to business, efforts, as a rule, have not been very successful. One of two erroneous attitudes has usually been responsible for the ineffectiveness of efforts in this direction. Either it has been assumed that the question of what a city should do and how it should do it is too technical and complicated a matter for the understanding of the layman, or attempts in the direction of enlightening the public on the fundamental principles underlying municipal activity have been too restricted and one-sided. There are scores of associations interested in some particular phase of municipal activity, such as playground associations, public library associations, housing associations, city planning associations, tax associations and many others which devote most of their energy toward trying to show that their particular concerns are the most important of all the problems that confront the city. The educative value of such organizations is not to be minimized. But the chief trouble with them has been that their very multiplicity and enthusiasm have confused the municipal citizen quite as much as they have enlightened him. What he requires above all things in order to have an intelligent opinion on the needs of his city is a simple but comprehensive survey of the whole field of municipal endeavor. Then and only then may he be in a position to discriminate between many desirable objects, not all of which are capable of immediate attainment. To offer such a survey, which every intelligent member of the community can readily comprehend, is the fundamental purpose of this volume.

It seems apparent that while the enlightenment of the entire citizenship is the ultimate object to be desired, for

many years to come the progress of municipal improvement and the active work in its behalf will depend on that portion of the community which has been favored with the best educational advantages, that is, the college bred men and women. There is much material available for textbook use on the organization side of municipal government. There are also many books on particular phases of municipal activities, some of them popular, but many of them too technical. But there is very little in the way of books that try to cover the whole range of the major activities of cities. With a view to meeting this lack also in the textbook field, this book is intended for use as a textbook in college classes in municipal government.

Neither footnotes nor bibliography have been emphasized in this work. Footnotes destroy the interest of a book without materially adding to its value in other respects, especially where a book is intended for the general reader as well as for the college student. Bibliographies, though helpful, need not be repeated at this time when the excellent bibliography recently prepared by Professor Munro is still up to date. The reader or student who would go more minutely into any of the topics discussed or touched upon in this book is advised to turn to Professor Munro's "Bibliography of Municipal Government" for a very complete list of references. Detailed and extensive statistics are likewise quite as likely to repel as to attract, and have been eliminated as far as possible for the purpose of making the work more readable. Excellent statistical information on American cities is readily available in the publications of the United States Census Bureau.

University of Texas. H. G. J.
February, 1917.

INTRODUCTION

Few realize how closely the modern city affects our lives and well-being. Until one analyzes it, and that quite closely, it is looked upon with a certain degree of indifference, largely because we have become so accustomed to the services which it performs.

City government, however, touches more people at more points more frequently than any other branch of government. All of this is brought out clearly and concisely by Professor James in the present volume. His discussion is at once academic and practical—academic in that it relates the functions and the development of the city through history, and practical in its description and discussion of the functions now performed.

Professor James has brought to the preparation of the book not only a sound American education, but study abroad. Moreover he approaches the question from the point of view of the smaller community. Too many books deal with municipal government from the standpoint of the larger cities, and thus give unconsciously, but none the less completely, a feeling of hopelessness because the smaller communities feel that their problems are too few and too small in comparison with those of the larger communities, whereas municipal problems are really the same everywhere, differing in degree rather than in kind.

Professor James also brings to the preparation of this volume a deep interest in the subject as manifested by

his active coöperation with the National Municipal League and the *National Municipal Review,* and he is also secretary of the League of Texas Municipalities as well as head of the Bureau of Municipal Research at the University of Texas. These various connections have given him a sympathetic touch with the problem of the practical application of municipal government to various conditions. This volume, therefore, will prove of service to the student in the classroom, and to the general reader, and will be helpful and stimulating to the city official.

CLINTON ROGERS WOODRUFF.

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MUNICIPAL FUNCTIONS

CHAPTER I

THE GROWTH OF MUNICIPAL FUNCTIONS

No study of the manifold and complex activities of the modern city would be complete without a brief presentation of the stages through which the sphere of action of the city has passed. Phenomenal as has been the increase in the number and diversity of functions of the city in the last century, more extensive and significant than all of the developments which preceded this period, nevertheless a number of the fundamental activities of our modern city had their origin in times much more remote, as far back indeed as our knowledge of cities extends. Though intervening centuries saw a stagnation and even a marked retrogression in the matter of municipal activities, it is necessary to begin with the era of the Greek cities to discover the beginnings of many of the functions performed by cities today.

The Greek cities were distinguished from modern cities in one fundamental particular that had a great influence on the kind and number of functions performed by them: they were not subordinate parts of a larger political whole, but were themselves both city and state. Many of the functions that were performed by them are today performed by the governments of the states of which cities are a part. That is simply because the idea

of the modern state has developed beyond that of the city-state, and where cities are parts of a state these functions must be intrusted to the larger unit. So the great branches of public administration that deal with foreign affairs, war, and justice were, perforce, functions of the Greek city-states, but are nowhere today, with but a few interesting exceptions, performed by cities. In the other two principal branches of governmental administration, finances and internal affairs, which are today divided between state and city, the Greek city-states were also the sole agencies of government. The important problem of a proper division of these functions, of which more will be said later, did not, therefore, arise in those cities. For the same reason, however, it becomes impossible in discussing the activities of the Greek cities to make a clear distinction between municipal and state activities.

Most important of the municipal functions of the Greek cities, taking Athens as one of the best known examples, was the construction and maintenance of public works. As early as the sixth century B. C., a public water supply was conducted into the city by underground conduits from the surrounding country. This was not usually distributed into the individual houses but to the public fountains and baths. Street paving was but poorly done, but good roads were constructed connecting the city with the surrounding country. Public buildings were constructed on an extravagant scale, including temples, theaters, gymnasia, and monuments. The Acropolis alone at Athens is said to have cost the equivalent of over thirty million dollars. Other public works of importance were found at Piræus, the harbor of Athens, which is one of the earliest cities known to have been laid out according to a city plan.

Education and charity were both functions of the government to a certain extent, the former being primarily training for citizenship in the fine arts and for the army, the latter consisting principally in the distribution of grain to the poor. But police regulation, sanitation, and social welfare activities were practically unknown, though Athens was a city of several hundred thousand people, nine-tenths of whom, it is true, were slaves. Housing conditions for a large part of the population were miserable, streets were not kept clean and were not lighted, and municipal conditions generally would have been intolerable but for the large part played by outdoor activities in the life of the population.

The moneys for the expenditures of the city were not ordinarily raised by direct taxation, but by customs duties and other indirect taxes, as well as by tributes and the income from public lands and properties which were commonly leased out to private operators. Most of the money was spent for satisfying the national love of the fine arts and for the recreation of the leisure classes, the protection and improvement of the other elements in the city being apparently a matter of little or no concern.

The later Greek cities, under the dominion of Alexander the Great, showed no development in the matter of municipal functions over the earlier city-states, but their activities were restricted more largely to municipal as distinct from state functions, for they had lost their autonomy. Construction of cities according to a definite plan was not uncommon during this period, but public works on a large scale continued to be the chief and almost sole governmental activity.

One of the chief characteristics of the Roman period was the concentration of population in urban communi-

ties. In the Roman Empire there were hundreds of cities, varying from small hamlets to the metropolis of a million inhabitants or more. At the beginning of the Christian era there were a number of important cities throughout the Empire, some of them having more than a hundred thousand population. Real urban conditions and urban problems were therefore presented in the cities of that time and it will be interesting to examine to what extent these cities attempted to meet those problems.

With the exception of Rome herself, all these cities were real municipalities, that is, units of local government subordinate to a higher authority which performed the state or national functions. In local matters the cities under the control of Rome exercised a considerable but varying amount of autonomy, though the capital retained a power of supervision even in this regard. More important than governmental control, however, was the power of example which led the other cities of the realm to imitate and emulate the mistress city of the world in their activities. Just as Athens, therefore, showed the highest development of the city in Greek times, so Rome may be taken as exemplifying the highest point of development of that time in a governmental way.

In Rome, too, we find that the building of public works constituted the chief activity of the city in its internal administration. At first they were constructed by contract, but after the Empire the work was done directly by the government. Most famous of the building operations for public services were the aqueducts which brought a plentiful supply of pure water from the hills as far as fifty miles away. Though not piped except to the houses of the wealthy, this water was available for drinking at public fountains and for bathing at the baths.

These baths, some of them of palatial proportions and equipment, were in a number of instances left by the Emperors to the citizens as public baths. They constituted the center of the social life of the city. Rome was well provided, particularly in the later period, with open squares and parks for outdoor recreation, a favorite pastime with the Romans. But in other respects the aspect of the city on its physical side was far from attractive. Streets were narrow, crooked, dirty, and ill paved or not paved at all. Houses projected into and over the streets, and the shops and booths left little room for the pedestrians, who were in constant danger from carts and animals. After the great fire in Nero's time, it is true, the city was rebuilt according to plans prepared by architects, and building restrictions were imposed, but the physical condition of the streets was never brought up to the standards demanded by a modern city.

Police protection was most inadequate. Until the time of the Empire there was virtually no police protection at all, robberies being common and house owners relying on their slaves to act as watchmen at night. The streets were most insecure at night, and to make matters worse there was no attempt at lighting the streets. A large force of over seven thousand men was organized by Augustus to keep order and extinguish fires, but even after that the police protection was very inferior. Of sanitary regulation there was almost none. Though the city built drains and sewers, the most famous of which, the *cloaca maxima*, still stands and is used today, the filth of the city was not properly taken care of and the Tiber became a source of serious epidemics. Housing conditions, except for the wealthy, were miserable, the poorer people being crowded into congested filthy tene-

ments operated for profit by the landlords, without any regulation.

Education was apparently not regarded as a government function in Rome, at least not in the way of providing public schools, but there were good libraries, some of them furnished by the Emperors. Poor relief was managed as in earlier days in Athens by the distribution of grain to the poor. This seems to have become a regular undertaking which gradually resulted in practically feeding the poorer population altogether, relieving them of the necessity of working for their living.

With the fall of the Roman Empire there came a decadence of city life in western Europe. The barbaric invasions destroyed the economic basis of city life and many cities disappeared altogether at this time, while others diminished greatly in size and importance. Municipal activities were almost nil and consisted chiefly in providing walls and fortifications for defense. In the eastern empire, however, city life continued to flourish and the principal cities along the trade routes were places of considerable size and importance.

After an interval of some seven or eight hundred years cities again grew up and flourished in the West. This was due to a revival of trade and industry. In Italy, Spain, France, and Germany cities began to develop along the principal trade routes. During the next four hundred years cities flourished in all of these countries, some of them attaining to a respectable size, between one hundred and two hundred thousand population. But even at their zenith they were smaller and less important than the larger cities of the ancient empire and were far behind the latter in the development of municipal activities. They attained varying degrees of autonomy in the various countries mentioned and

their governmental machinery showed great variations. Most of the important cities of this period, however, were organized on the basis of the trade and merchant guilds, which, starting as approximate democracies, gradually degenerated into oligarchies and autocracies, becoming more and more corrupt and inefficient.

The chief undertakings of the medieval cities were the public works. At first the fortifications were their chief concern, then the construction of ports, markets, and other agencies of trade and commerce occupied their attention. Town halls of an elaborate character, cathedrals, storehouses, and public baths were among the buildings erected by the cities. But other public services were either wholly lacking or very inadequately cared for. Street paving and cleaning were rare and street lighting was unknown. Organized police forces were either wanting or entirely inadequate and the lack of fire protection facilities caused many of the cities to suffer devastating conflagrations. Education and charities, at first wholly left to the clergy, were even in the later Middle Ages but little supported by the municipalities. Public health was not cared for and living conditions were most insanitary. Plagues and epidemics of various kinds were common and the death rate in the cities was enormous. Activities connected with industry and trade were well looked after, but in other respects the medieval cities, so far from showing any advances in municipal administration over the cities of the Roman period, were in many cases far behind the development of the earlier times.

The period following the Middle Ages was one of marked transition in the municipal conditions of Europe. The cities that had gained importance and power in the preceding period now, for the most part, declined or

disappeared and new cities in other places grew up. This was caused in large part by the destruction of the old trade lines along which the important cities had been located, and the opening up of new channels of trade with the discovery of America and other new navigation routes. Accordingly we see important cities developing in Spain, Portugal, and the Netherlands, equaling in size and importance the largest cities of the Middle Ages, and being, like many of them, practically city-states. The basis of organization in these cities, also, was commonly that of the merchant guilds. In Germany a number of the older cities survived and new places, particularly seaports, came into prominence. Cities of more than a hundred thousand population were not uncommon. These cities, particularly in Germany and the Netherlands, showed considerable improvements in municipal activities over the cities of the former period. Public works, street cleaning, police and fire protection, and education and charity showed marked advances; though the period of the Thirty Years' War brought a serious interruption in these developments.

In France, Paris was the most important city not only of that country, but of all Europe. Even at the close of the Middle Ages Paris led in the matter of population, and by the early part of the eighteenth century it had attained nearly a million and a half. Its preeminence lay not merely, however, in its size, but also in the state of governmental activity it had attained. It is true that this activity was for the most part not municipal, being developed by the royal government, but, nevertheless, the improvements brought about in that city were not without considerable effect on developments in other cities, in France and elsewhere, which strove to approach the conditions there found. A men-

tion of the improvements made during this period will therefore serve to show the most advanced state of development attained at this time.

In the early part of this period conditions in Paris were no better than in other European cities, as regards police and fire protection, sanitation, and general living conditions. But after the middle of the seventeenth century marked improvements were made. Public works were undertaken on a large scale, the beauty of the city was enhanced by boulevards and monumental structures, a regular police force was provided, lighting and cleaning of streets were required, and a regular fire brigade organized.

Contrasted with this era of improvement in Paris were the miserable conditions in London at this time. London, though the only large city in England up to this time, had by the end of the seventeenth century attained a population of half a million, making it second in size to Paris. Professor Fairlie gives a vivid description of conditions in this, the second largest city of Europe, as late as the end of the seventeenth century. Speaking of the failure of the government to put into effect Sir Christopher Wren's plans for the rebuilding of London after the great fire of 1666, Professor Fairlie goes on to say:

> Not only did the narrow streets and crooked alleys remain, but little effort was made to render them even passable. The pavement was detestable; all foreigners cried shame upon it. The drainage was so bad that in rainy weather the gutters soon became torrents. Open spaces within the town were receptacles for offal and cinders, for dead cats and dead dogs. The houses were not numbered, and, until the end of Charles II's reign, most of the streets were in profound darkness. Falls, bruises, and broken bones were of frequent occurrence. Pails were emptied from upper windows with lit-

tle regard for those passing below. Sewers for the disposal of waste were absolutely unknown. Thieves and robbers plied their trade with impunity; while the dissolute youth of the better classes amused themselves at night by breaking windows, upsetting sedan chairs, beating quiet men, and offering rude caresses to pretty women. It is true, there was an act of common council which provided that more than one thousand watchmen should be constantly on the alert from sunset to sunrise, and that every inhabitant should take his turn of duty. But few of those who were summoned left their homes; and those few generally found it more agreeable to tipple in ale-houses than to pace the streets.

During the eighteenth century improvements were made in London in the lighting, water supply, and police protection, but in most respects London remained far behind Paris, while the other cities of England, though few of them were more than mere towns, were even worse off than London.

It was a striking characteristic of this period that city governments throughout Europe became increasingly corrupt and undemocratic, and at the same time, in all the continental European countries, more and more subject to central domination and control.

The nineteenth century worked most profound changes in the municipal systems of the leading countries of Europe—England, France, and Prussia. These changes were of two kinds, improvements in the organization of the city governments and extension of their activities. The two developments were so closely related that it is impossible to discuss the one without mentioning the other, although our chief interest lies in tracing the increase in the field of municipal activity.

France was the first country to break with the municipal traditions of the old régime. At the time of the Revolution French cities had inefficient, undemocratic

forms of government, of varying types, but all of them more or less under central domination. There was then virtually no local autonomy, and the indifference as to proper municipal conditions on the part of the central government was equaled only by the lack of interest of the citizens themselves in a government which they were powerless to improve. The Revolution, with characteristic iconoclasm, destroyed this system root and branch. For heterogeneity of municipal organization it substituted uniformity; for oligarchy, democracy; for central domination, almost complete autonomy. This fundamental innovation proved to be too radical and was later superseded by the Napoleonic system, as undemocratic and destructive of local authority as had been the system under the Bourbons prior to the Revolution. But the ideal of local democracy and autonomy envisaged by the legislation of the Constituent Assembly was never again completely lost sight of. Though the succeeding monarchies and empires modified the measures of the republics making for municipal autonomy and democracy, there was a gradual general development in that direction, and the Municipal Corporations Act of the Third Republic bore the stamp of both of these principles.

It is not possible here to give even a brief description of the form of city government under which the French cities operate, though it is worth emphasizing that democracy in city government, as in all government, tends to stimulate interest in the functions of the government and so to encourage the meeting of municipal needs and the solution of municipal problems. Of even greater significance, however, for the development of municipal activities is the scope of powers granted to the cities. Local needs are obviously experienced locally first of all, and the possibility of satisfying such needs should

be lodged in the hands of the local government. That is the principle underlying the grant of powers to the French cities. The French municipal council is given powers to regulate the affairs of the city.

This general grant of powers is greatly limited, it is true, by the provisions of the municipal code requiring the approval of the higher administrative authorities for many of the acts of the council, and by the entire system of strict administrative control over the city in general. But nevertheless, as a statement of the proper principle upon which powers should be granted to cities it is valuable, and there can be no question that a measure of administrative control must be retained by the state if a grant of large local autonomy is to work well. The ultimate supremacy of the national law-making authority is, of course, retained and can be exercised at any time. The important point to be kept in mind, however, is that this authority need not be invoked by the cities every time they wish to satisfy a local need.

Prussia was the next important state to undertake the reform of her cities in the matter of organization and powers. At the very beginning of the nineteenth century, the Prussian city, like the pre-Revolutionary French city, was a creature of the central government. There was no real local participation in the government. The offices were filled by appointees of the central authorities, the government was inefficient, and the local citizens, being without voice or influence in the management of local affairs, had little or no interest in their city. The troubled years of Napoleonic domination in Prussia, 1807 to 1813, witnessed many governmental reforms of fundamental significance, not the least important of which was the reform of municipal government. The Municipal Government Act of 1808 prepared

by Baron vom Stein marked an epoch for Prussian cities. This act, and the subsequent legislation based upon it, introduced a large measure of democracy into the local government—though, owing to the three class system of voting, the franchise is much less democratic than in France—provided for a large measure of lay participation in municipal administration, and above all gave the cities a large grant of local powers. As in France, the cities are empowered to do what seems to be for their best interests, provided they do not act in conflict with higher laws. As in France also, there are requirements for the approval of the higher administrative authorities for certain kinds of municipal acts, though the German cities have fewer of their powers dependent upon such approval. It is this large freedom of action, granted in general terms to the Prussian cities, which has been largely responsible for the fact that Prussian cities today, and other German cities governed largely on the Prussian model, lead the world in the extent to which they meet local needs through municipal action.

England was the last of the three European countries considered to modernize her city government. As late as 1835 English cities were largely medieval in the composition and activities of the municipal government. The government was, in the vast majority of cities, in the hands of a close corporation consisting of a very small portion of the inhabitants. The officers were in almost all cases inefficient and in many cases corrupt. The city as such had few powers of government and those few were either not exercised at all or performed in an inefficient or corrupt manner. These conditions, as discovered by an investigation by a special commission, led to the passage in 1835 of the Municipal Corporations Act. This act reformed the cities on the organization side by introducing

democracy in place of the oligarchy dominant before. The entire spirit of municipal government was thereby altered, and in place of suspicion and distrust there developed in the minds of the citizens a feeling of interest and regard for the local government. As regards the grant of powers, however, this act did not go as far as the French and Prussian reform acts. No general grant of local powers was made and few specific powers were granted in the act. The old common-law doctrine that a city was a corporation of limited powers, with only such functions as were clearly conferred upon it, was not superseded by any general grant. There remained in England, therefore, the necessity for every city to go to the legislature for authority to undertake any project not expressly authorized before. It is true that Parliament conferred many powers by subsequent general legislation and delegated to central administrative authorities the power to give cities additional powers in certain cases, but, in spite of that fact, English cities are still in many cases compelled to go to Parliament for a special act permitting them to engage upon a new municipal undertaking. In the matter of local powers, therefore, English cities are still at a disadvantage as compared with the cities of the continental European countries considered.

On the functional side the developments of the last century in European cities were no less remarkable than those on the organization side. With democracy and local autonomy introduced the conditions were favorable for the development of a proper governmental activity. The increase of general education and the development particularly of the natural sciences were other important factors in municipal improvement during the latest period.

Adequate police protection, up to that time afforded in almost no city of Europe, was rapidly developed in European cities following the establishment of the first modern police force in London in 1829. Regular, organized, paid fire departments did not develop until the nineteenth century, which also witnessed the first serious attempts at fire prevention by means of building regulations. Prior to the nineteenth century public health activities were limited to emergency measures undertaken to prevent the introduction and spread of epidemics, particularly of the cholera and the plague. In the last hundred years the health department has been developed as an important and continuous branch of city administration in all important European cities, with special emphasis on the preventive side. Public education, though introduced in Prussia in the eighteenth century, did not begin to supplant private and ecclesiastical control in most countries of Europe until well into the nineteenth century. England established her first system of public schools in 1870. Public works, almost the sole field of activity as we have seen in which the ancient cities and European cities prior to the nineteenth century were engaged, showed a remarkable development in the latest period. Streets which had been but poorly paved, even in the capitals of Europe, were in the nineteenth century better paved in all the important cities. Street cleaning became for the first time a municipal function in most larger cities, and effective street lighting is also distinctly a nineteenth century development, largely because illuminating gas and electricity were not available as lighting mediums before that time. Sewerage systems and the treatment of sewage are practically nineteenth century developments for almost all European cities, though London and Paris had some sewerage at a good deal

earlier date. Waterworks, though among the most stupendous undertakings of the ancient cities, were not equaled in size again until the latter part of the nineteenth century. The rapid increase in the size of cities, the greater amount of water used by modern city dwellers, and the increasing pollution of natural watercourses all combined to make the question of an adequate water supply distinctly a nineteenth century municipal problem.

More significant than all of these nineteenth century developments so far mentioned, most of which present the development of the city on its material or physical side, is the progress made, within very recent times for the most part, along lines of social welfare. Briefly stated, this social progress has been in the direction of municipal action directed toward improving the condition of the economically weak or dependent elements in the community. This includes not merely the work of charities, that is the ministering to those actually without sufficient food and clothing, though even that fundamental work was left to private and church activity until recent times. It extends much further and envisages the improvement of all the living conditions of the wage earning class. Proper housing regulations, employment bureaus, municipal markets, public medical assistance, municipal pawnshops, savings banks and insurance offices, opportunities for cheap or even free recreation are only some of the activities of the modern European city which were almost unknown and unthought of a hundred years ago. In these respects the German cities have advanced farther than any other cities of the world, and it is from them that other cities are learning in this as in other directions. City planning as a means not merely of city beautification and convenience of traffic, but as a program for increasing the

safety and pleasure of city life for all classes, is another distinctly nineteenth century development of European cities, which promises in a way to combine and correlate all the other activities considered.

Perhaps the most striking and, in some ways, the fundamental development of the nineteenth century affecting European cities was the phenomenal concentration of population in cities. Not only did cities increase in number but they increased enormously in size and contained an ever increasing proportion of the entire population. In England, the first of the three countries under consideration to show a marked urban concentration, there were at the beginning of the nineteenth century only fifteen cities with a population greater than twenty thousand, and of these London was the only city with more than a hundred thousand population. The percentage of the entire population of England and Wales living in these cities was at that time less than seventeen per cent. By the end of the century there were in England and Wales thirty-seven cities with more than one hundred thousand population and the percentage of the population living in cities of twenty thousand or more had increased to fifty per cent, the highest percentage found in any of the countries under consideration.

In Germany, that is, the territory now comprised in the German Empire, there were at the beginning of the century only two cities with more than a hundred thousand population and the percentage of population in cities of more than twenty thousand in the three principal states, Prussia, Saxony, and Bavaria, was six per cent. A very rapid urban concentration began after the middle of the century and was especially marked after the establishment of the Empire in 1871. By the end of the century there were in the German Empire thirty-three

cities with more than one hundred thousand population, and over twenty-five per cent of the people lived in cities of twenty thousand population or over.

France is the least urban of the three European countries under consideration, owing primarily to the slower industrial development, but even in France there were more than twenty-two per cent of the population living in cities of twenty thousand or over at the close of the century, as compared with less than seven per cent at the beginning of the century. At the close of the century there were a dozen cities in France with more than a hundred thousand population, whereas at the beginning of the century there were but three.

The significance of this development—a development that is continuing unabated in the present century—lies in the fact that the tremendous and rapid increase in the size of cities complicated the problems of city government manifoldly and almost made imperative the changes in the form of organization and the expansion of functions which were noted above.

The history of American cities prior to the nineteenth century has almost no importance for our purposes here, for up to that time there were few cities of any size, those few were small, they performed very few functions, and even those in a very rudimentary manner. In 1800 there were no cities of more than a hundred thousand population, and only five with more than twenty thousand, the total population of which was less than four per cent of the entire population of the country. Even the most fundamental functions of police and fire protection were scarcely attempted by the cities, while public health was quite unprovided for and municipal improvements almost unknown. Even in 1810 New York City, having then a population of about one hun-

dred thousand persons, expended but a dollar per capita per year for all municipal purposes, while cities of that size today spend from ten to twenty times that much.

Urban concentration was no less a nineteenth century phenomenon in the United States than in the European countries noted. In 1900 the percentage of population in the United States living in cities of more than twenty thousand inhabitants had increased to twenty-seven per cent and more than eighteen per cent of the total population lived in cities of over one hundred thousand. By 1910 these two percentages had increased to over thirty-two per cent and twenty-two per cent respectively, showing that the development is continuing to an even more marked degree. The same cause, that is, the increase in urban concentration, should have the same effect, that is, a corresponding increase in municipal functions, in the United States as in Europe, and in large measure this has been true. But American cities have not kept pace in this regard with European cities, more especially those of Germany. Doubtless many factors contributed to this situation, but among the most potent must be considered the difference in the measure of the local powers granted to cities in the United States as compared with those of Germany and Europe generally. From the very beginning of the history of the cities in the independent American states they have been mendicants for powers from the all-powerful legislatures. Few powers were granted in the charters and those few were considerably circumscribed. The courts, by adopting at the outset a policy of strict construction against municipal powers not clearly granted, crippled our cities still more and made them more than ever dependent on minute legislative action. Consequently, as new powers became imperative, owing to increasingly complex municipal conditions, each

separate undertaking had to be sanctioned by the legislature, sometimes years after the need had developed. No matter how desirable a municipal project might seem, no matter how willing the citizens might be to undertake the financial burden, the city in question was powerless to satisfy its wants until an ignorant, indifferent, and sometimes corrupt legislature could be induced to act favorably on the grant of power desired.

How different would have been the case had our American cities, like those of Germany, been able to meet each situation as it arose in the light of local conditions, provided only that no general state law was contravened, and subject to salutory administrative control. The method we have adopted in this country of protecting the cities by constitutional provision against legislative interference in certain municipal matters, though perhaps the only remedy for the legislative abuses that had arisen, is at best a cumbersome and ineffective way of dealing with the problem and far less satisfactory than the policy of legislative grant of comprehensive local powers adopted by continental European countries. Until the movement for municipal home rule, as now typified in this country by so-called home rule constitutional provisions, bears fruit in a sound public opinion and a legislative practice that will insure a free sphere of action within proper limits, the best development will not have been attained, though some gratifying improvement over earlier conditions will have been recorded under the system of constitutional limitations on the legislative power.

Surveying now briefly the development of municipal functions in the United States during the nineteenth century we find that the rudimentary police protection by constables and night watchmen found in the colonial

towns was not superseded by regular professional police forces until well into the second third of the century and then only in the larger cities. In the same way the means of fire protection did not change from the old-time inefficient volunteer system to the paid permanent fire departments until about the middle of the century. Special public health authorities made their appearance in the early years of the century in a few of the larger cities, but their activities were practically confined to dealing with epidemics of contagious diseases. Here again it was after the middle of the century before any American city had a permanent force of health inspectors, though most of the large cities had boards of health and health officers by that time.

Public elementary education, from the first a function of the New England colonial towns, was one of the earliest municipal functions in the United States. There developed a tendency, however, to separate the school administration from the other municipal functions and to intrust it to special boards not under the control of the regular municipal authorities. While this is true today in most cases, the connection between the school administration and the city has always been so close that it must properly be considered a municipal function even where separate authorities are provided. Poor relief developed as a municipal function in the larger cities during the nineteenth century, though it has generally been regarded as fundamentally a county function in the United States, save in New England.

The most remarkable municipal development of the century was the increase in the number and importance of the public works. Street paving, which had been of the worst kind until after the Revolution, continued to be very largely the old cobblestone kind until well into

the nineteenth century. After the middle of the century granite blocks came into use and then wooden pavements. Brick and various kinds of asphalt sheet pavements marked further improvements in the latter part of the century and the amount of paving increased steadily. Street lighting developed with the introduction of illuminating gas, but was generally let by contract to a private concern, though Philadelphia had a municipal plant in 1845. Sewerage works did not develop generally until after the middle of the century, though Boston had a municipal sewer system in 1823. By the end of the century most of the larger cities had developed their sewer systems. Sewage disposal plants were a development of the closing years of the century.

Most important and most extensive of municipal public works are the water supply systems. These did not develop on any large scale in the United States until well along toward the middle of the century, the first large modern system being the Croton reservoir and aqueduct in New York, completed in 1842. Thereafter municipal waterworks began to be constructed in the medium-sized cities as well as the larger ones, until the majority of the waterworks in all but the smallest cities were municipally owned and operated.

In the field of municipal ownership and operation of other public utilities, such as street railways, markets, electric light plants, etc., the nineteenth century did not mark nearly as great a development in the cities of the United States as in those of England and Germany, partly because of the greater political individualism, partly because of distrust of city government in general, and partly, as has been stated, because of the necessity of going to the legislature for authority to enter upon any new undertaking.

The nineteenth century was not marked in the case of American cities by any such significant changes in the organization of the government as occurred in England in 1835, in France under the Third Republic, and in Prussia in 1808. The so-called federal type of city government, copied after the checks and balances principle of the federal government, with its mayor chosen by popular vote, displaced the old English colonial type of borough administration by a council just about at the turning of the nineteenth century. The federal or mayor and council form then remained the practically universal type of American city, with important modifications, it is true, throughout the entire century.

A word may be said in conclusion concerning the tendency manifested in American city government in the new century. On the organization side the origin and spread of commission government and the commission manager plan are proving of the utmost significance. Though a discussion of these developments falls outside the scope of this work, it must be pointed out that if the claims of increased administrative efficiency made for these forms of city government as compared with the old type are well founded, their introduction cannot fail to have some effect on the functional side of American city government. A part, no doubt, of the failure of American cities to undertake all the functions they might have undertaken must be traced back to a lack of confidence on the part of the taxpayer that money voted for such functions would be efficiently spent. The establishment of real administrative efficiency, therefore, would do much to remove that impediment to enlarged activity of our cities.

On the functional side, these first few years of the twentieth century have been filled with significance. Not

only are all the old municipal activities being developed and perfected, but new ones are being undertaken. These new activities are mostly in the field of social welfare work, a hitherto largely neglected field in American cities. An awakening to a new social consciousness among city dwellers may well be said to be the most significant tendency of the new century, and though we are still far behind the most advanced European cities in this regard, there is every reason to hope that this development will continue without abatement in the next years.

CHAPTER II

PUBLIC SAFETY

Fundamental among governmental functions is the preservation of public safety, meaning both safety for the life, liberty, and property of the individuals that constitute the public and also the security of the government itself. The former aspect of public safety has been a charge of cities from earliest times, though, as has been seen, it is a duty that was indifferently discharged in the ancient cities, almost entirely neglected in the Middle Ages, and not systematically undertaken until the nineteenth century. There are several phases of the preservation of public safety all of which fall under the general concept of the police power, as understood in American public law. But the three principal activities under that head comprise police administration in the narrower sense, fire protection, and public health activities. Public health administration, being a distinct and well defined branch of the work of preserving public safety, is treated in a separate chapter, while police protection in the narrower sense, and fire protection are sufficiently related phases of public safety activities to be treated in one chapter.

POLICE PROTECTION

Used in the narrower sense, then, we may consider under the head of the police activities of cities those activities which are commonly intrusted to the regularly organized, professional, uniformed class of city officials that constitute the police force. It may be noted at the outset that there is a considerable difference in the scope of functions performed by this branch of the city's service in the United States and on the continent of Europe. But some of the most important functions performed by city police are fairly universal and may, therefore, be considered as characteristic.

In the first place, the earliest and most important function of the police force is to patrol the streets in order to preserve order, prevent crimes and misdemeanors, and apprehend evildoers. It is obvious that in order to accomplish this purpose the force of patrolmen must be large enough, throughout the city, to establish a reasonable certainty of detection and apprehension, for certainty of apprehension and punishment constitutes the greatest deterrent of crime. The number of patrolmen should, therefore, be sufficient to have every portion of the city covered at frequent intervals by a patrolman on his beat. Only by thus making it really unsafe for the criminal to prosecute his work can the amount of crime be appreciably decreased. Obviously a greater number of men will be required for this purpose at night than in the daytime.

If we turn to the practice of cities as regards the size of the patrol force maintained we see that police statistics are usually presented in the form of figures showing so many policemen per ten thousand inhabitants.[1] But it

[1] For instance, the following table taken from Munro: "Principles and Methods of Municipal Administration," p. 288, note 1, shows the

would seem to be clear that from the point of view of effective patrolling the important consideration is not the number of patrolmen per thousand population, but rather the number per square mile. Of two cities having the same population and the same number of policemen, one might be well policed and the other poorly policed if the area of one were double that of the other. On the other hand, for other purposes and because of other considerations the ratio of policemen to population is important, for it is almost invariably true that that ratio increases with the population of the city, largely irrespective of the increase in area. More important than mere numbers in this connection, however, is the character of the city population, principally industrial or commercial centers requiring larger police forces than cities that are chiefly residential.

The *modus operandi* of the police force in dealing with crimes and the more serious misdemeanors is the arrest of the offenders when caught. A fair measure of the effectiveness of the police force in preventing

ratio of the number of police per ten thousand population in some of the larger European and American cities.

City	Pop. (1910)	Number of Police	Number of Police per 10,000 population
Berlin	2,070,695	7,914	38
Paris	2,846,986	7,890	28
London (Metropolitan)	7,231,701	20,540	36
Glasgow	784,496	2,020	34
New York	4,766,833	10,383	21
Chicago	2,185,283	4,251	19
Philadelphia	1,549,008	3,565	23
Boston	670,585	1,561	23

such crimes and misdemeanors would, therefore, seem to be found in the number of such offenses committed in which the offenders are not apprehended. But the mere number of arrests made by the police force is no certain test of its efficiency. In the first place, as the policeman has authority to compel obedience to his order of arrest, he may act on insufficient suspicion or justification and so swell the number of his arrests, though his prisoners may on examination all be discharged. In the second place, a vast number of the arrests made by city police forces are for drunkenness and vagrancy and many of these present cases that should not be treated by arrest at all, but by helpful measures, such as were inaugurated in Toledo and other cities under the so-called golden rule system. Instead of trying to increase the number of arrests for these offenses, policemen were instructed to avoid arrests and content themselves with warnings and even to assist intoxicated persons to their homes.

One important aspect of this phase of police activity is the efficiency of the police courts of the city. When arrests are necessary they must, to be effective, be followed up by prosecution and punishment. In this, too, it is important that the policeman do his part effectively in the marshaling and presentation of his evidence and his non-susceptibility to improper influence. But more than that is required. The most effective and faithful police force is crippled in the performance of this part of its work if the magistrates of the courts do not do their duty and uphold the executive arm of the law. The futility of arresting offenders, who are almost certain to be released by the magistrate if they prove to have influence, not only discourages the policeman in his work, but weakens his power of resisting the tempta-

tion that is usually presented to him of letting the offender off without arrest.

The apprehension of offenders who are not caught in the commission of the act is usually delegated to a special branch of the police force known as the detective service. This may be separately organized, as in the larger cities, or may simply employ members of the ordinary patrol force, as is usually the case in the smaller cities. This is, of course, a most important part of the work of the police force, but that it is far from satisfactorily performed in all cases is partly evidenced by the flourishing state of many private detective agencies in which the public generally has much more confidence than in the regular police detectives.

A large number of other duties besides the mere patrolling of the streets and the arrest of offenders are assigned to the city's police force. The general preservation of order and decency by the dispelling of disorderly mobs and assemblies, the abatement of all kinds of nuisances, the dispensation of information, first aid to the injured, the regulation of traffic are only a few of the duties that devolve upon the police force of the modern city. In the preservation of orderliness and decency, and particularly in the protection of women against annoyance, a new development has recently occurred in the United States, namely, the introduction of the policewoman. It has been found that for this purpose women are more valuable than men, and the number of cities that are introducing police matrons and policewomen is rapidly increasing.

One very important activity of the city police in the United States is that which brings them into contact with the supervision of what is called vice, particularly gambling, the liquor traffic, and the social evil. These

activities are, in the United States, not merely vices but also in large measure crimes, that is, they are forbidden and punishable by law. In the same category from this point of view may be put Sunday amusements, where they are forbidden. The proper treatment of these municipal problems and their importance will be taken up in another connection. The important point to be emphasized in this place is that the enforcement of regulations dealing with these matters is, in the United States, intrusted to the regular police force of the city, whereas in continental Europe these matters are for the most part not subjected to such extensive regulation, and even such regulation as exists is not intrusted to the ordinary police force of the city. It is generally agreed by students of the municipal police problem in this country that a very large part of the police corruption and inefficiency for which American cities have acquired an unenviable reputation is traceable to charging the regular police with this function of enforcing standards of morals with which in many cases a large portion of the population is not in sympathy.

Certainly there can be no question that the enforcement of such regulations as these has no very intimate connection with the ordinary problem of protecting the safety of the person and property of the individual, which is the primary function of the police. For that reason the recent development of permanent morals commissions in a few American cities with a special corps of workers is to be welcomed not only as a promising step in the direction of vice control, but also as an aid in diminishing the forces of corruption at work on the police force.

Very important results in the direction of increasing public safety have been attained by the development of

the traffic squad of the city police forces. The continually increasing congestion of pedestrian traffic in the cities combined with the phenomenal multiplication of fast-moving vehicles, such as automobiles and motorcycles of all kinds, have combined to demand an ever rising toll of lives from accidents. Almost all of these accidents are the result of carelessness on the part of the drivers of the vehicles or on the part of the pedestrians, or both, and can be avoided if proper traffic regulations are efficiently administered by policemen with special training and aptitude for that work. Safety zones, isles of safety, and semaphores are among some of the modern devices used for increasing the safety of traffic at street intersections, while motorcycle policemen are proving equal to the difficult task of preventing dangerous speeding along the streets of the city.

While an enumeration of the tasks that devolve upon the police force of a modern American city would seem to make them sufficiently comprehensive and varied, there are still other functions which are imposed upon the police in continental European cities that are not so intimately connected with the protection of person and property and which are not exercised by the American police. Chief among these is the system of police surveillance developed to its highest point in Prussia among western European countries, by which the police attempt to keep track of the movements of every individual in the state. This is done by keeping a careful registry of every individual that comes into and leaves a community, ascertaining whence he came, what his business is, and when he leaves, and all facts requisite to identify him. Of course such a system of registry is a very important factor in keeping track of criminals and suspicious persons and so is a direct aid in that part of the

police work. But as the information obtained is used also for a variety of other administrative purposes, particularly for making up the tax rolls and the voting lists, and keeping track of persons liable for military service, it cannot be regarded as wholly the subject matter of police administration in the narrower sense of protecting public safety. The collection of vital statistics is another function commonly imposed upon the regular police force in continental Europe which, so far as it is done at all in the cities of the United States, is done through other officers. It can be seen, therefore, that the scope of action of the police force in European cities is considerably greater than that of the police in American cities, and it may be noted that a considerable portion of that additional activity is really more for state than for local purposes, a fact which must be kept in mind in considering the question of the relation of the city police force to the state.

It is probably accurate to say that in no other branch of municipal activity is there a more intimate connection between the manner of organizing and administering the work of the department and the success of that work than exists in the case of the police department. While perfection of organization will not of itself, of course, insure satisfactory results in this or any other undertaking, public or private, experience has shown that unless certain principles are followed in the constitution of the police department of a city it is idle to hope for good results. Still other features are perhaps less essential but, nevertheless, play an important part in the smooth working of the force.

One of these fundamental principles of organization is that the police department of a city must be organized on a military basis. This means, above all else, a strict

discipline, complete obedience on the part of subordinates, and a clear, undivided responsibility centralized in a single officer at the head. The earliest police forces that developed in cities in continental Europe were actually part of the regular military forces of the state and were intended to perform semi-political functions in guarding the safety of the government rather than to look after the safety of the individual. Even today the *gendarmerie* in those states, though no longer an integral part of the military forces, has every appearance of the regular military. The ordinary police in the cities, moreover, are organized strictly along military lines and are indeed officered largely by former military officers. The uniform has, therefore, been a characteristic of those police systems from the first.

In England and the United States, where military traditions have never flourished, the establishment of uniformed police systems along military lines met with the severest opposition. Though every one complained loudly in London at the beginning of the nineteenth century of the lack of protection to person and property under the old lay watch and guard system, a veritable storm of indignation was let loose when, in 1829, a modern uniformed police force on a military model was first established in the metropolis. The same experience was repeated, in modified form, in New York City when, for the first time in this country, a uniformed police force on the English model was introduced in 1857. The obvious advantage of the new system has led to its adoption in all cities, even those of the smallest class. The uniforms, which were at first regarded by the policemen themselves as badges of inferiority and quasi serfdom, have come to add the dignity and prestige which come from exterior signs of organization and

authority. More practical and serviceable uniforms have been developed than the old blue coat with large brass buttons and the heavy helmet and have added to the comfort of the policemen without destroying the advantages of a uniformed force.

At the head of the police force, as has been said, there must be a single officer. That principle has not by any means always been recognized in the organization of police departments in this country, for police boards have been plentiful and are still to be found in many cities today. But authorities are pretty well agreed that the single commissioner plan is the only proper form of organization, and in the larger cities the board plan is rapidly becoming extinct. In continental European cities there is invariably a single head. But as to the best manner of choosing this officer and, even more, as to the kind of man that should be chosen, neither theory nor practice shows any unanimity. It is obvious that he should not be popularly elected, though in the past that has been not unknown as a method of filling the office in American cities. In the mayor and council form of government he should be appointed by the mayor and be absolutely responsible to him. In the commission form the head of the police department is inevitably and unfortunately one of the elected commissioners. In the commission manager form of city government there is something of a difference of opinion as to whether the police department should be under the supervisory jurisdiction of the city manager with a department head appointed by him, or should be intrusted to an official selected by the commission and independent of the manager. The former would seem, from considerations of general administrative expediency rather than from the purely police administration standpoint, to be the

better plan. In England the head of the city police force is selected by the watch committee of the council, which has general administrative control over the department. On the continent of Europe the head of the police force is usually either the mayor, acting in that capacity as a state rather than local official, or an official appointed by the central authorities. This raises the whole big question of the relation between local police and the central government, which will be touched upon a little later.

As to the kind of person to be chosen as head of the police force, there are three general possibilities, each of which has some advantages and some drawbacks and each of which can be found exemplified either in the United States or in some of the European countries considered. In the first place, the commissioner may be chosen from private life without any experience in the police department whatsoever. In the second place, he may be promoted from the ranks to the commissionership. In the third place, he may be chosen because of general experience and ability in the public service of the city or the state, though without any first-hand knowledge of police administration.

The first two methods of choice are the ones employed in the cities of the United States with but a few notable exceptions. As to the merit of choosing the one kind of man over the other there is considerable difference of opinion. The technical advantage and skill which comes to a man from going up through the ranks and getting a thorough acquaintance with the business in all its details is as great in the business of police administration as in any other business. Furthermore, the *esprit de corps* and the loyalty of the force to a man who has risen from the ranks by real ability are likely to

be greater than toward a layman who will be quite likely to be considered a "green-horn." If the work of the police force consisted solely or even largely in the mere problem of managing the force of men and looking after the technical details of the department, the superiority of the man who had come up through the ranks would hardly be questioned. But the work of the police department touches the general public at so many tender points and involves so many delicate considerations of tact and expediency that many personal characteristics are required for a successful police commissioner, at least in a democracy. These qualities of tact, broad-mindedness, and firmness withal are more likely to be blunted than sharpened by service in the ranks and promotion therefrom, and can only rarely be found combined in the same individual with an intimate acquaintance with the technical details. It becomes, therefore, really a question as to which of the two kinds of qualities are the more important or the more difficult to supply. Since so large and important a portion of the police commissioner's work involves quasi political aspects in the sense of considerations of policy, it would seem natural to follow the analogy of department heads in the national government and select a person with the requisite personal attributes to act in technical matters on the advice of a subordinate who does have a complete technical acquaintance with the work of the department. The lay commissioner, therefore, assisted by a superintendent or chief of police who has risen from the ranks would seem to be better than a technical head who lacked the personal attributes.

Everything depends obviously in this arrangement on the selection of the proper person for the lay commissioner. It would be an evident advantage to secure a

man who had had experience in the work of public administration and had shown marked executive ability of a kind required particularly for the police department. In the United States, unfortunately, such men are rare and seldom available. A few instances might be mentioned, however, such as Commissioner Bingham of New York, who was a former army officer. The commissionership of New York City was recently offered to General Goethals on the basis of his administrative record with the Panama Canal. But these are exceptional instances, the choice in American cities lying apparently between an inexperienced layman and a more or less narrow professional policeman. In European countries, however, the realm of choice is much wider and police commissioners are commonly chosen from other administrative fields.

The military organization is continued down from the chief or head, and even the military terms for officers are used, such as captains, lieutenants and sergeants. The larger the city the more extensive is the hierarchy of officials and the more complicated the machinery. In large cities the territory is divided into precincts, each of which has its station under the direction of a captain or other higher officer. In such cases the captain is responsible to the superintendent, chief or commissioner for the efficiency of the station and force under his control, and on the caliber of the captains will depend in large part the efficiency of the service as a whole. In the smaller cities, the chief is directly in contact with the entire force, being aided only by a few subordinate officers. Between the patrolmen and the head of the department there are men who act largely as inspectors of the work of the patrolling force. Their rank and title vary according to the size of the city and, also, among

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cities of the same size. They perform such duties as mustering the men before going on patrol duty, calling the roll, and inspecting their appearance and general condition.

The conduct of the police station, whether there be only one central station or a number of precinct stations, involves, in the first place, the keeping of a complete record, known as the police blotter, on which are entered all occurrences in the station. This duty is usually intrusted to a clerk, as a desk sergeant, and constitutes a very important means of judging of the activities of the department and its force. Another duty of the force at the station is to take care of persons brought in under arrest, persons who have been injured, children who are lost, and all persons appealing to the police for aid or shelter. The police station must always be kept open with some one on duty, involving the use of a night force. This brings up the question of the distribution of the patrol force between day and night.

As has been pointed out above, it is obvious that, so far as the work of patrolling the streets of the city is concerned, and that occupies the time of four-fifths of the police force in American cities, not only is it as necessary to have a patrolling force at night as well as in the daytime, but that force, in order to do its work as well, must needs be larger. Something, of course, will depend on the adequacy of the lighting system of the city, for the better the system of lighting the streets the greater the area of effectiveness of each patrolman. But even with the best system of lighting practicable, a larger force will be needed for this purpose than during the day, though other phases of police activity, like that of traffic policemen, obviously require fewer men at night.

Three general schemes, based on the varying number of

platoons or shifts, have been advocated and tried for meeting the necessity of having all day and all night police service. These are the two, three and five platoon systems, showing variations in the hours of active service, reserve service, leisure hours and size of the force on duty.

The two-platoon system is the one most commonly found in American cities, almost altogether in the smaller cities. The two-platoon plan employs one-fourth of the patrol force during the day, and one-half at night for active duty, leaving one-fourth in reserve at all times. Under this plan each man gets off twelve hours on two days out of every four, two hours on one day, and no time on the fourth day, his time being divided between active and reserve duty. This system has the advantage of getting a great deal of patrol service out of the force, but gives the patrolmen virtually no leisure, and destroys the possibility of any real family life. Furthermore, in the police force, quite as much as in other activities requiring alertness and physical fitness, if not indeed more, the efficiency of the individual in his patrol duty is impaired by the long hours of continuous service. Nevertheless, because of its economy in salaries, it is the system generally adopted.

The three-platoon system is based theoretically on the eight-hour day, one-third of the force being on duty day and night, one-ninth being in reserve, and no patrolman being called on for more than eight hours' duty in twenty-four, though he does not always have the same hours off. The main difficulty with this system, from the point of view of police protection, is that it does not meet the necessity of having more men on duty during the night than during the day. Furthermore, it is not regarded as providing a sufficiently large reserve force.

On the other hand, it is a more humane method of treating the police force, and is believed to increase the individual efficiency of the patrolman. It does not absolutely require an increase in the police force, but it does mean that for a given expenditure of money a smaller amount of police service, active and reserve, is secured. The demand for the introduction of the three-platoon system naturally arises chiefly from the police force itself, and considering the irregularity of the leisure time that is left to policemen even under this system, the desire for an eight-hour working day in this as in other departments of municipal service, would not seem to be unreasonable. The largest cities of the United States are now using the three-platoon system.

The five-platoon system is urged as a means of remedying the objections to the three-platoon system. As tried in New York, this system doubled the number of patrolmen at night over the number active in the day, but no policeman has more than six hours' consecutive duty, and is given one day off in five. The leisure time of patrolmen always amounted to twelve consecutive hours, and though the reserve force under this system was large, the patrolmen were permitted to sleep on reserve duty when not actually required. From the point of view of adequate police protection, this is a better system than the three-platoon system, and is more favorable to the individual patrolman. Obviously, however, it requires a considerably larger force for the same protection, and is open to objection, therefore, on the ground of expense. Though humane treatment of patrolmen and adequacy of the patrolling force are both expensive considerations that cannot for that reason be ignored, the cost of police protection must also be carefully considered.

This leads us to consider briefly the cost of police administration in modern cities. Here again, as in the case of statistics showing the number of policemen per ten thousand population, the figures commonly given show the cost per capita of population. It is just as true in this regard, however, as in the other case, that the per capita cost of the police force is a matter of little or no importance, as it serves to indicate neither the adequacy of the force, the relative returns from the expenditure, nor the financial burden on the individual citizen. A much better standard of comparison is the cost per unit of area, though even this will be considerably affected by the character of the population of the city. As a test of the financial burden of police protection on that basis should be chosen the ratio to the taxable property of the city. In European cities, the cost of the police force, per policeman, is very much less than in the United States, due primarily, however, to the larger salaries paid American policemen.

The salary item, including pensions, where those are given, constitutes by far the largest amount of the police budget. A thousand dollars a year represents a fair average salary for patrolmen in all but the smaller cities in the United States. This amount is the double of the pay given to patrolmen even in the largest European cities, though there must be added the important items of uniform and equipment allowances, and, above all, pensions, which make the real remuneration a good deal larger than the mere salary. Some allowance must also be made for differences in the purchasing power of the money received. Uniforms are not commonly furnished to policemen in the United States, and though pension systems are quite commonly provided for retired policemen in this country, a considerable proportion of such

pension funds are drawn, not from the city treasury, as in Europe, but from subscriptions by the public. The same reasons for pensions would seem to exist in the case of the police departments as in the case of soldiers, at least so far as incapacity resulting from accidents suffered in an extra-hazardous undertaking for the public, and widows' and orphans' allowances for death resulting in the same way are concerned. In other regards, the case for police pensions for old age would seem to rest on the same grounds as the case for civil pensions generally.

A system of pensions properly administered, though commonly attacked in the United States as a raid upon the treasury, is in reality an economical way of solving the problem of the superannuated public servant. Experience in our state and federal governments, as well as in our city governments, has shown that the public is quite willing to tolerate the retention of worn-out, useless men in the public service who have grown old in that service. The result has been that not only are they actually paid a pension under the guise of a salary, but, what is much worse, they set a standard of efficiency in the service to which all the rest of the machinery almost inevitably slows down. The resulting loss in efficiency and money, though less patent, is a much more serious raid upon the public treasury than a well-ordered system of pensions which would displace it. An old-age pension system for the police force would, therefore, prove a wise adjunct, although not peculiarly demanded in that branch of the service more than in others. It has also the added advantage of tending to make the public service more attractive.

Of absolutely fundamental importance to the efficiency of the police force of a city is the manner of filling the positions in the service. In a large measure this is, of

course, the fundamental problem of efficient administration in every branch of the city's activity. It is peculiarly important, however, that the police force of the city be composed of the right sort of men, not only because their function is fundamental to the very existence of the community, but because they are subjected to a peculiar pressure by the forces that are antagonistic to law and order. It has already been pointed out how the American practice of making the regular city police the guardians of moral standards, frequently imposed upon the city in violation of its own convictions, inflicts a tremendous strain on the police administration not borne by the already otherwise more efficient continental European police forces. To resist this strain in itself requires a high order of individual on the force. But even where that element does not enter, the financial value of police protection in the conduct of any kind of illegal business or undertaking is so great as to make it very profitable for the men who control such interest to use money freely in trying to corrupt the police force from top to bottom. In the higher positions this evil influence takes the form of political activity of a pernicious kind for the purpose of controlling the responsible directors of the police force. If that fails, the cruder forms of direct corruption of the patrolmen and inspectors is resorted to. It is probably true that no single official in the city service, certainly none in the lower ranks and grades of service, is so likely to be subjected to the danger of corrupting influence as is the city policeman.

Unfortunately for the problem of police administration this situation, calling for a manner of filling the police force that will insure the highest caliber of men available and eliminate to the fullest extent detrimental political considerations, is complicated by the fact that the or-

dinary devices employed for eliminating these corrupting influences in city administration generally are more difficult to apply in that department than in any other. Reference is here had to the so-called civil service merit system of filling positions in the city's service.

As the entire civil service merit system is of such general fundamental importance in the matter of efficient city administration, though peculiarly important for the police service, a brief consideration must here be given to its general principles. The theory of the merit system is simplicity itself. Men should be appointed to administrative positions only on the basis of proven fitness and superiority over other applicants. They should be held up to a high standard of efficiency in their work and should be promoted, rewarded, disciplined and dismissed purely on the basis of their service as shown by carefully devised and faithfully kept records. On those general principles there is substantial agreement, though on the means of accomplishing those ends most effectively there is considerable divergence of opinion.

The method of securing appointment as nearly as possible according to proven fitness has been, in the United States, the system of competitive examination, in part at least written, and the appointment of the highest person, or one of the few highest, on the list. This examination is to be devised so as to show as far as possible the candidate's fitness for the particular place for which he is applying. In order to give an opportunity of seeing whether the successful candidate should actually, after appointment, prove to be lacking in important respects in a way to make him unfit for his position, a period of probation is prescribed, after which the appointment becomes permanent.

The record of the appointee in his service is calculated

to show how he attends to his duties, whether he neglects them, or performs them in a satisfactory way, or shows superior ability and faithfulness. Increases in salary, promotions in rank and other rewards are to be awarded on the basis of such records, including the opinion of superiors in office and evidence of fitness for new duties by means of additional examinations. Disciplinary measures of all kinds, from a mere reprimand up to dismissal from the service, are also to be enforced on the basis of these carefully kept records.

Simple as this merit program seems in outline, it shows the most astonishing complications and difficulties in practical application. What kind of examinations can give an adequate picture of the candidate's fitness? Are written examinations adapted to discovering certain qualities that may be much more important than mere book knowledge? How can records be devised that will make an impartial record of a man's attitude toward his work, his superiors and the public, factors that might make an apparently efficient man a demoralizing element in the service? Who is to determine whether a man's offense merits dismissal or merely suspension or a lesser punishment? How can personal spite and prejudice be eliminated in the matter of punishment and arbitrary or unfair action be prevented without destroying the necessary spirit of discipline? All these are difficult questions on which experts, theoretical and practical, are not agreed.

In the application of these principles to the police force of the city, peculiar difficulties are encountered. There is, in the first place, the matter of examinations for appointment. A sanitary inspector, a meter inspector, a surveyor, a bookkeeper, a stenographer, a host of the officers in the city have duties, fitness for which can be determined with considerable accuracy by competitive ex-

amination. For policemen, physical and mental tests, though important, touch only a few of the fundamental qualifications required. Mastery of the police manual, a knowledge of criminal law, accuracy with firearms, an intimate knowledge of the city, can all, it is true, be tested by proper examinations. But though these are the tools of the policeman's work, his real fitness depends quite as much on other qualifications. Integrity, bravery, tact, control of body and temper, these are the prerequisites that are essential. But these are just the sort of qualities that cannot be tested by any system of examinations, nor even by brief periods of probation. As a means of insuring the selection of the best candidate out of a list of applications for positions on the police force, examinations are obviously, therefore, no guarantee of infallibility. This has led some persons to denounce them as wholly useless and inapplicable to that branch of municipal administration. This is, however, an unjustifiable attitude, for, although the examination system is admittedly imperfect, no better scheme for choosing the men has been suggested, and the only other basis of choice that has been widely adopted in this country, that of political allegiance and service, is just what it is imperative to avoid. Appointment by examination, therefore, remains the best method now available, and improvements are continually being made in the character of the examinations used.

When we consider the matter of efficiency records as a basis of promotion or discipline in the police force, peculiar difficulties are again encountered. The activities of the large number of officials and employees engaged in duties of a clerical nature can be pretty accurately rated according to rapidity and accuracy. But the record of activities of patrolmen is a much more difficult record to

keep in such a way as to indicate relative efficiency. A large number of arrests, for instance, may mean simply that the patrolman is stationed where disturbances are frequent and arrests unavoidable. It may mean, on the other hand, that he is unusually diligent and successful in apprehending evildoers. It may even mean, however, misdirected activity in making arrests when warnings should have been issued, or, worse still, an unjustified activity for the purpose of increasing his arrest records. Conversely, a policeman's record practically clear of arrests may prove either neglect of duty, or proper discrimination in dealing with cases, or may be simply the result of the particular duty to which he has been assigned. Demerits entered against a policeman because of complaints entered by persons on his beat may be justified because of neglect of duty, or the complaints may constitute a positive evidence of efficiency in bringing violaters of the law to time. With regard, therefore, to the larger aspects of efficient service, neither the record of arrests, nor the absence of complaints, two factors commonly accorded considerable weight in judging of patrolmen's records, in and of themselves prove anything. Of course, positive misdemeanors, on the one hand, and acts of unusual heroism, on the other hand, can be noted and given due weight, but those are exceptional occurrences, not frequent enough in the everyday activity of the police force to constitute a satisfactory basis for conferring rewards or administering punishments. In spite of these inherent difficulties, however, it is better that records should be kept and used with the greatest possible discrimination than that promotion should be on the basis merely of seniority, or, worse still, of pure favoritism.

Perhaps the greatest difficulty of all those encountered

in applying the principles of the merit system to the police force is found in the matter of removals. No principle of administration is more self-evident or generally accepted than that there can be no real administrative control or responsibility without the removal power. Discipline is an idle dream if the subordinate can defy the superior and the latter is powerless to remove him. It is true that the civil service system was first applied in our cities in the direction of preventing political removals, by requiring that removals should be for legal cause. But this same requirement proved subsequently, in New York City, where it was introduced, to be the means of demoralizing the police force by removing the question of the dismissal of a subordinate from the hands of the commissioner to the courts. In no branch of the city service is it more important that the removal power be left in the hands of the responsible head of the department than in the case of the police department. Quite recently the post of the head of the New York Police Department was declined by General Goethals for the express reason, it is said, that he was not accorded complete removal power.

Of course, arbitrary and unjustified removals are undesirable in the police force as well as elsewhere in the municipal administration. But limitations on the removal power of the head are much more to be deplored, and the device of allowing an appeal to some other body from the order of removal, though less objectionable in other branches of the administration, must be discarded in connection with the city police. Such safeguards as arise from a requirement of written charges and a public hearing, if desired by the individual affected, are as far as it is wise to go in putting any sort of checks on the removal power of the responsible head. It should not

be overlooked that, with a properly administered system of appointment examinations, the temptation to make political removals is practically overcome, as the vacancy thus created could not be filled in accordance with the desires of the removing officer anyway.

Even under the best system of examinations that could be devised in order to determine the relative fitness of candidates for positions on the police force, it will still be true that even the successful candidates are relatively ignorant of a large part of the duties they will have to perform. At present, with a comparatively small number of cities actually employing careful examinations for appointment, this is normally true of all the new men. It is very important, therefore, that the rank and file of policemen learn at the earliest possible date after being taken onto the force, in as scientific a manner as can be, the best method of performing their functions. This can be done through police training schools such as are found in all countries of Europe, and have recently been established in a few of the larger cities of this country. The problem of training men for the public service in all its positions is one of fundamental importance to the efficiency of all public administration, national, state, and local, yet one that is still far from its solution in the United States. But the need of training the men already in the service better to perform their functions is even more immediate, and fortunately not so complicated. In the police department, particularly, is it true that previous work and experience in other fields is less likely to be of direct benefit than is the case in most of the clerical and technical positions in the city service. The more need therefore of a school provided by the city wherein the members of the force can get the information they are almost certain to lack.

One final point of prime importance remains to be considered in discussing the problem of police administration in cities, and that is the relation of the local police force to the state government. This is, of course, but one phase of the larger question as to the proper relations between the cities in the exercise of what might be considered local functions and the central government, a question which, as has been suggested before, is one of great importance and of equal complexity. As was the case with regard to the civil service merit system just considered, so also in regard to this matter of the relation of the city to the state, the application of general principles, even were they generally accepted, presents peculiar difficulties in connection with the problem of police administration. As there is, however, little agreement in theory and less uniformity in practice in the whole question of regulating the relations between state and municipality, this question, instead of being considered in its general aspects here, can best be taken up individually in connection with the study of the different classes of functions to be dealt with. Indeed, about the only guiding principle on which there can be said to be pretty general agreement, so far as the relation of the state to municipal activities is concerned, must be stated in very general terms. In general, the city should have perfect freedom in pursuing its various activities, so long as they do not materially affect the welfare of the state in general as well as that of the inhabitants of the city. So far as the state, however, has larger interests involved in any municipal activities, the state must retain some measure of control. But what activities of cities do or may materially affect the welfare of the state, and to what extent, and how the desirable control of the state is to be exercised, those are the difficult and mooted questions.

It has been suggested that in these regards the police activities of cities occupy a somewhat peculiar position. So far as the intimacy of interests between the police forces in cities and the state as a whole is concerned, the situation is certainly striking. Since a large, and perhaps the largest, certainly the most fundamental, function of city police departments consists in the enforcement of laws passed by the state, it is obvious that, whatever the form of organization and whatever the method of control, the city police are really and directly state agents. It is here not merely a question of the general agency of municipalities and municipal officers for carrying out the local government purposes of the state. It is a much more specific and immediate state function that is being directly intrusted to municipal agents. For that reason one would naturally expect the control exercised by the state to be more complete in this field than in any other.

In European countries generally, at least on the continent, we see this intimacy of functional relations between city police and state governments strikingly recognized in a corresponding closeness of governmental relations. In the larger continental European cities the police commissioner is a state officer, appointed and removable by the central government and responsible to it alone. Even in the smaller cities, where the local executive is commonly charged with the duty of administering the police service, he does so distinctly as state agent and is subjected to a very complete control and supervision in all his dealings in that capacity. So, for instance, in France and Prussia, even in the smaller cities where special state commissioners are not employed, the appointments to the police force made by the local executive are subject to central approval. Police ordinances, moreover, are generally made not by the local council but by the local exe-

cutive, subject to approval by the higher administrative authorities.

In England, the police force of London is under direct central control, the police commissioner being a royal appointee. In the provincial cities, the borough council, through one of its standing committees, has complete control over the police administration. But the arm of the central government makes itself felt even there in the interests of a certain minimum police efficiency at any rate. The National Treasury pays annual subventions, amounting to about one-third of the cost of police administration in the cities, to those municipalities whose force meets a standard of efficiency in men and equipment determined by the Home Office and investigated by its inspectors. This form of state intervention in local police administration is less rigid and complete than that found in continental cities; nevertheless, the threat of withholding the annual subvention is in itself a powerful argument which needs no other compulsion. The fact that the authority which the state thus wields in local police matters has not been used to force the municipalities to a maximum of police efficiency does not make the power of interference and the possibilities of control less real.

Even in the United States, recognition of the character of city police as direct state agents has not been lacking. Some of our courts have held, for instance, that police officers, though locally appointed and locally paid, are not local officers but state officers, at least for certain purposes. In some of our larger cities, as has been seen, local control has been entirely superseded by state control, and police administration has been in the hands of a state board. This solution of the problem has not commended itself generally, however, and a number of

the states repealed these measures of state control. To-day Baltimore, Boston and St. Louis are the only ones among the larger cities of the country that have state police commissions.

Theoretically speaking, there seems to be no doubt that the desirability, if not indeed the necessity, of direct state administration is greater in the case of the police activity than of any other function commonly performed by cities. Yet there seems to be so strong a sentiment against such direct state activity that there is little hope of it ever being generally adopted. State administration in the United States has not, generally speaking, been on so high a plane that a transfer of functions from city to state necessarily promised an improvement. Furthermore, the duties of police include besides the enforcement of state laws the execution of local ordinances as well, and it is only reasonable, therefore, that local authorities should have a voice corresponding to the local interest, especially when the costs of police administration are borne by the inhabitants of the city.

Some plan of administration, therefore, which would accord to the local authorities their legitimate share in police administration and yet assure to the state the means of looking after the proper enforcement of state laws would seem to be the most satisfactory solution of this problem. The local appointment and direction of the force, with a power of removal on the part of the state government in case a violation of the state interest is shown, would seem to offer a promising way out of the difficulty. It would seem to offer some advantages if the state paid a share of the cost of local police administration, but made such contributions dependent, as in the English boroughs, upon their measuring up to a definite standard of efficiency.

FIRE PROTECTION

There are two conceivable methods of dealing with the problem of protecting the community and the individuals in the community from loss of life and property by fire. One is to concentrate energy on the prevention of fire, or at least on the reduction of its occurrence to a minimum, and so obviate the need of installing elaborate and expensive apparatus for dealing with fires when they do occur. The other is to ignore methods of preventing the occurrence and likelihood of spread of fires and to develop correspondingly elaborate and efficient fire-fighting systems. Broadly speaking, the first method of dealing with this problem of public safety has been adopted by European cities; the second is the characteristically American method. To illustrate, the annual fire loss in American cities is more than two dollars and fifty cents per capita, while the average cost of maintaining the fire-fighting departments is more than one dollar and fifty cents per capita per year. In Europe, the annual expenditure for fire-fighting forces is about twenty cents per capita, while the annual per capita fire loss is about thirty cents. In other words, American cities, though spending eight times as much for fire-fighting equipment, lose eight times as much property by fire. It is a false pride, therefore, which Americans are apt to show in pointing to the superiority of the fire departments in this country. Rather is that superiority and expensiveness evidence of the most short-sighted policy.

The figures with regard to annual fire losses in the United States are simply staggering. It is estimated that if all items are properly taken into account, that is, actual cash value of buildings destroyed, insurance due to great fire risk, additional water service required, cost of the

fire departments, etc., but not including loss of business, employment and life, the annual loss will total nearly five hundred million dollars. When it is remembered, furthermore, that by far the greater part of this loss must be classed as preventable, it can readily be seen what tremendous significance the problem of fire prevention assumes. It will be worth while, therefore, to enumerate very briefly some of the most important factors involved in this problem.

Foremost among the causes of fires must be placed individual negligence, negligence due in part to sheer ignorance, in large part also to mere heedlessness. The careless disposition of burning matches; the indiscriminate disposal of cigar and cigarette butts; leaving movable gas jets lighted near the wall or curtains; leaving electric irons with current turned on; investigating gas leaks with burning matches; cleaning clothes with gasoline or benzine near open lights; using electric lights wrapped in clothes as warming agents—are but a few of the almost countless ways in which this ignorance and this carelessness manifest themselves. The mere accumulation of inflammable waste is an act of culpable negligence. The obvious remedy for this important source of fires is not legislation but education. The fire prevention authority of the city, therefore, whether a part of the police department, or of the fire department, or a separate bureau, should devote a large amount of energy to a campaign of education calculated to dispel the ignorance that exists with regard to possible fire origin, and to bring home by repeated emphasis the need of reasonable care in dealing with possible sources of fire. The best place to begin such a campaign of education and publicity is, of course, in the schools, where illustrated lectures and moving pictures can be used to advantage. But the present generation of adults

is quite as much in need of enlightenment as is the coming generation, and these same methods should be employed to reach the grown men and women of the city. Leaflets or cards containing a comprehensive list of fundamental "don'ts" would have considerable value if widely distributed. This educational work may be effectively supplemented and vitalized by prohibiting some of the most obvious and avoidable acts of carelessness and making their commission punishable. Furthermore, if a liability in damages is imposed by law on the person whose carelessness causes money loss to his neighbors or to the city, the lessons in fire-prevention will be more likely to be remembered.

There are other causes of the origin of fires which are not so directly traceable to negligence at the time of the fire and in the ordinary activities of life. Indeed, they may not even be avoidable by the occupant of the premises. Such risk must be avoided by governmental action through ordinances and inspection. Among these causes may be enumerated defective electric wiring, either defectively installed or subsequently damaged in some unknown way; defective chimneys and flues; undiscovered leaks in gas pipes; instances of spontaneous combustion, etc. These dangers can be avoided as a rule only by having proper ordinances covering the wiring and piping of houses and the construction of flues, and by frequent inspection to see, not merely that the original construction was proper, but that the condition at all times is safe. A rather recent fire risk has been added in the danger of sewer explosions resulting from the gasoline and oil wastes from garages. It has been found necessary to forbid emptying of such waste into the sewers, because of the danger from explosion and fire.

It must be pointed out that, though most fires originate

in carelessness, a considerable number are the result of positive volition. A few of these latter can be attributed to incendiarism for purposes of revenge, but they are relatively so few as to be almost negligible. More important by far are the fires resulting from a desire to collect insurance. Such fires are not merely criminal in that they defraud the insurance companies and through them all insurers, but also in that they set agencies into motion which may get beyond control and cause the destruction of property beyond that owned by the insured as well as resulting in injury and loss of life to others. Two or three steps are necessary for meeting this evil. In the first place, a very careful system of investigating the origin of fires is prerequisite for placing responsibility. In the second place, very severe penalties must be provided and strictly applied to all cases of willful incendiarism. In the third place, if these measures are not sufficient, the evil must be combatted by removing the motive for such fires. If the owner must by law bear a fourth or a fifth of any loss that occurs, the temptation to sell out a building or a stock of goods to the insurance company is largely removed. Such a legal limitation would, however, seem to be a heroic measure of last resort, for it would seem unfair and contrary to public policy to prevent an honest property owner from covering his possessions to a full, fair value with insurance in order to keep dishonest owners from willfully setting fire to their property, unless that should prove the only feasible way of remedying the situation.

Fire risk due to negligence or even maliciousness or greed will probably never be wholly eliminated, and, of course, unpreventable fires will always occur. The next important consideration after preventing as far as possible their occurrence is to prevent their spreading when they

do occur. In the matter of the number of fires that originate, European cities will not show such a great difference from American cities. In the proportion of fires, however, that become serious by spreading from the immediate vicinity of the place in which they originated, the record of American cities is far behind that of European cities. This fact has all the more significance when it is recalled that in active fire-fighting apparatus, such as men, engines, high pressure streams, etc., American cities are in general much better equipped. This phase of fire prevention involves almost wholly the question of building construction, and demands, therefore, both careful and comprehensive ordinances, and continuous, painstaking inspection.

The prevention of the spread of fires, though a fundamental question, is by no means the only one involved in the problem of building regulation. It would be perfectly possible, physically speaking, to have every house in the city so built both within and without as to make the spread of fires a virtual impossibility. But, as a matter of policy, that would be an extremely unwise measure, for the cost of such construction would in many cases be absolutely prohibitive. It becomes, therefore, a question of relative protection against fire. Buildings should be made as fire-resisting as is reasonably possible, and on the question of reasonableness, of course, men will disagree. Other considerations, furthermore, besides the form and materials of construction, play an important part in this question. The proximity of the buildings, as well as the uses to which they are put, must be taken into consideration, and will affect the kind of construction that must be prescribed.

In American cities there are commonly two classes of buildings from the point of view of fire risk, those within

the fire limits and those without. The former class, comprising usually all those within the more densely built-up areas, must conform to certain requirements as to construction, while the buildings in the rest of the city need not. Since, however, the conditions as to congestion and character of occupancy differ in different parts of the city, it is neither logical nor effective to divide the entire city into two zones simply. Different districts of the city should receive separate consideration for this purpose, as they should for other purposes of zoning.

Regulations intended to prevent the spread of conflagrations within buildings look generally to such matters as fireproof or fire-resisting floors and partitions, air-tight doors, etc. Safeguards against the spread of fires from other buildings look particularly to the construction of roofs. Wooden shingles on roofs are a continual source of danger in spreading fires, and are generally prohibited within the fire limits. Experience has shown, however, that even without the congested areas wood shingles are a very great risk. They are easily carried by the wind for great distances, and in their dry state on the roofs constitute an ideal lodging place for burning particles of all kinds. The experience of American cities with wooden shingles as a means of spreading fires would appear to justify the prohibition of such shingles within the city entirely, especially as artificial shingles of fire-resisting materials are being perfected at a relatively slight increase in cost.

Another means of preventing the spread of fires, independently of the activities of city fire-fighting forces, which will be considered directly, are the requirements that property owners provide on the premises various kinds of fire extinguishers. These devices include all sorts of instrumentalities, from ordinary hand-operated

chemical extinguishers to standpipes with hose attachments. Such ready instruments can frequently extinguish a conflagration in its inceptive stages, which if left untouched until even the most rapid fire-fighting force could arrive on the scene would become a serious fire. Certainly the cheaper forms of hand extinguishers could reasonably be required for all buildings, whether dwellings or business establishments. In large buildings and theaters automatic ceiling sprinklers are proving valuable means of checking fires at the outset.

So far, the question of fire protection has been regarded in its relation to the preservation of property only. There is, however, another side to the question, and that is the relation to human life and physical well being. It is estimated that about two thousand persons annually lose their lives by fire in the United States, while three or four times that number are seriously injured each year. This destruction of human life and capacity is nothing short of criminal, especially as proper regulations can, if faithfully enforced, virtually reduce that loss to nil, even when the occurrence of fires cannot wholly be prevented. Crowded tenements, factories, theaters and more recently, especially, moving picture theaters, are among the places that take the largest toll in lives lost in fires. This can all be avoided by requiring safeguards that are intended primarily to insure safety of egress for persons in a burning building. Fire escapes on the outside as well as concrete stairways on the inside, wide passages, doors swinging outward and kept free from obstructions, prohibitions on obstructing aisles, asbestos curtains kept in condition for instant lowering, location of the camera room outside the audience hall in moving picture theaters, are among the requirements that modern cities are enforcing and should all enforce in order to

reduce the danger to life and limb. Wherever large bodies of persons are crowded together there is especial danger to life from fire which needs to be specially guarded against. Such regulations belong properly in the building code, which should deal also with the requirements discussed above intended to prevent the destruction of property.

Fire prevention is making some progress in American cities, but unfortunately it is sporadic and develops usually only after some terrible conflagration or holocaust has stirred up the public consciousness. As a regular part of a normal program of civic improvement, it is still comparatively rare. Yet from the merely materialistic point of view of money cost a real effective system of fire prevention should appeal to the taxpayer as a saving of dollars. A small amount of money spent in enforcing an adequate building code will save a large amount of money in the cost of the fire departments, as the experience of European cities shows. Besides reducing the cost of insurance, it would also save the money loss always involved, the loss of wages and business profits, while the destroyed buildings are unavailable.

Fire prevention in the broad sense considered above, though the fundamental and most important phase of public safety against loss of life and property by fire, is not the only phase of fire protection. Even with great care on the part of individuals, and with adequate fire codes strictly enforced, some fires will always occur, and there must be some fire-fighting forces and apparatus. In the long interval that will unfortunately elapse until cities and individuals wake up fully to their duties in the matter of fire prevention, the need of efficient fire-fighting forces is imperative.

In the organization of municipal fire departments there

are two considerations of equal importance that must be kept in mind. One is the equipment in men, the other is the technical equipment in mechanical appliances. In both respects efficient instruments are a development of the nineteenth century. The early fire brigades, like the citizen watchmen, were loose and inefficient instrumentalities that had to be superseded by permanent paid forces. In practically all large cities of the world there are regularly paid and permanently manned fire-fighting forces. In the smaller cities, the tendency is to avoid the expense involved in a permanent paid department by relying on the services of volunteer companies. It is well to point out, however, that in this field, as in many other branches of municipal administration, there is great danger of a false economy. The salary item is commonly regarded as an element of clear saving when volunteer organizations are relied upon. But in considering the real cost of a volunteer company as compared with a paid force, it is necessary to take into consideration the greater fire loss resulting from amateur methods employed in a difficult undertaking requiring skill and experience, as well as the higher insurance rates which are paid in cities where volunteer protection is relied upon. If a careful study is made of these two items of expense —and they are, of course, borne by the same persons who would bear the increase in taxes necessary to support a paid department—it is safe to say that in many cities now practicing the economy of doing without a paid department, the apparent saving will prove to be an actual loss.

The problem of organizing the fire-fighting forces of the city is in many respects similar to that presented by the police organization previously considered. There is a similar need of strict discipline and concentration of

authority that require a single head and a quasi military organization. Many of the considerations that applied to the appointment, disciplinary control and manner of removal of members of the police force are pertinent with regard to the fireman, and we find a general similarity in their treatment. A slightly different factor is involved in the question of hours of service, however. Like the police force, the fire-fighting force must be available night as well as day, even to the necessity of a larger force at night, because it is then that fires are more likely to become serious before the alarm is turned in. Unlike the police force, however, the firemen are normally actually engaged in service only a small proportion of the time. This is inevitably the case because, if the force is to be adequate for coping with several fires at once, a contingency that frequently arises, or to handle unusually large conflagrations, it will obviously be considerably larger than is required for the ordinary number or size of fires. In view of this fact, cities have commonly employed a relatively small force of men and have required them to be available for service at all times, providing living quarters in the stations. Even then there are many hours each day and even entire days in which the firemen may not be called out, followed by days or successions of days in which they receive almost no rest. This presents a problem of administrative efficiency which is very difficult of solution, as this alternation of excessively busy days with days of comparative idleness tends to demoralize a working force of any kind. In some cities the two-platoon system, similar to the one described in connection with the police force, has been installed. In connection with the fire department, it has the drawback not merely of greatly increasing the cost of the department, but, also, the hours of idleness, during which, however,

the men can get no real recreation; whereas, in the police force, a patrolman is active during his period of duty and is free during his hours off. It seems that a satisfactory solution of this difficulty would involve not merely a larger force organized on the two-platoon system, but also the employment of a part of the forces on duty in other work for the city which would not prevent them from being available at once in case of an alarm. This would relieve the demoralizing monotony during the hours or days on which no alarms are turned in, and would tend to return to the city some of the additional money spent for the larger department. The chief obstacle to be feared in any such arrangement would probably be the opposition of the firemen themselves, who would be likely to look upon any other services as irksome or even degrading.

The fire-fighting forces are not, except in the very smallest cities, concentrated in one place, but are distributed in different portions of the city, with reference to ready availability for all parts of the city. Each station serves a definite district for ordinary fires, and for larger conflagrations the help of other companies is enlisted, the fire chief having command of all the forces of the city.

The mechanical aids used in fire fighting embrace in all cases an adequate water supply, pumping engines and hose and ladders. The necessity of a sufficient supply of water available at all points by means of hydrants conveniently placed and continuously ready for immediate use is, of course, fundamental. The waterworks themselves should be absolutely protected against destruction by fire, for many disastrous conflagrations have been the result of the waterworks being put out of commission at the outset, when located in the fire area. As the or-

dinary water pressure maintained in city mains is not sufficient to throw a large stream of water with much force or to an appreciable height, it is necessary to employ engines to supply the pressure at the hydrant to the hose. These engines, at first operated by hand, then by steam, were until recently horse-drawn vehicles. In recent years, however, the motor-drawn vehicle is rapidly supplanting the former type of locomotion, and is proving in every respect superior. It is more rapid in reaching the fires, less dangerous to traffic, and presents a much simpler problem of upkeep. In a few years the horse-drawn engine will be a thing of the past. For incipient and smaller fires the chemical engine, sending a small stream of liquid by chemical pressure, proves adequate and less destructive. In spite of the generally admirable equipment of American fire-fighting forces, defective hose has been an all-too-common and very serious result of graft in the city's contracting or purchasing department. Even where the best hose has been purchased, frequent tests are necessary to insure that the hose will not leak or burst under the great pressure to which it is subjected when in use. Long extension ladders are a necessary part of the equipment of every force, both for reaching the fire with the hose and for saving the lives of persons imprisoned in burning buildings. These facilities may be regarded as the irreducible minimum for every municipal fire department. To these must be added a fire alarm system in all cities covering a considerable area.

Other aids are, however, in common use, especially in the larger cities. Among these may be mentioned special high-pressure water systems, enabling effective streams to be thrown directly from the mains without the aid of fire engine, fire boats in cities located on bodies of water, and water towers for fighting fires in high buildings.

These are all expensive elaborations of the fire-fighting apparatus necessitated, however, in our larger cities because of the fire hazards that are allowed to remain. The constant occurrence of disastrous fires even in cities equipped with all of these newest developments is simply a further forceful reminder of the relative inadequacy of even the best extinguishing facilities as compared with proper preventive measures.

One final consideration that deserves mention is the question of state control in connection with the municipal fire-fighting forces. In continental European cities there are a few instances of state control of fire departments. In England the fire brigades are universally under local control, and in the United States there are but a few rare instances of state-controlled fire forces. It is obvious that the same arguments that favor a measure of state control, or at least supervision of local police forces, do not apply to the matter of fire-fighting forces, though the latter are frequently in an intimate organic connection with the former. An inefficient city police force, as has been pointed out, may mean a non-enforcement of state laws. An inefficient fire department, however, is a matter of almost purely local concern, as the citizens of the municipality are the sufferers, though in France and Germany the state makes it mandatory upon the cities to provide protection against fire. A state fire-prevention bureau would prove a valuable means of aiding cities in the development of fire prevention methods and would prove a wise measure of conservation for the state government to adopt, as has already been done by some of the states through the office of state fire marshal.

The two great factors in the insurance of public safety which have been considered in this chapter, namely, police and fire protection, together with the public health ad-

ministration, which will be taken up in the following chapter, constitute by far the largest part of the field of municipal activities connected with the whole subject of public safety. It must not be overlooked, however, that there are still other phases of public safety which cannot be ignored, but which are not properly treated under any one of the three main services discussed because not intrusted, in this country at least, to the care of either of the three departments. So, for instance, one very important question of public safety in our cities is the matter of grade crossings of railroads. Every year the grade crossing takes its large toll of lives, and the abolition of this danger is imperative for the proper execution of the duties connected with public safety. Overhead wires, both of street railways and of light companies, constitute another menace to public safety that modern cities must deal with. But these and other sources of danger that might be mentioned are not dealt with, in American cities at any rate, through the police department, nor intrusted to a special department of public safety. They can best be considered, therefore, in some other connection as, for instance, in the necessary elements of control over public service companies. It is only necessary, therefore, to point out here that they fall, functionally speaking, under the activities of the city calculated to protect the public safety.

CHAPTER III

PUBLIC HEALTH

Functionally considered the public health activities of the city belong to the activities that care for the public safety. Life and property are endangered by disease and must be protected against willful and negligent damage in this regard as well as in any other. Public health protection has, however, become so highly specialized and technical and is so different in its methods from the other measures for protecting the public safety, that it is almost universally treated in American cities as a separate branch of municipal administration, with its own organization and problems.

In one respect the protection of public health may be regarded as peculiarly a municipal duty. City life, inherently, is much more dangerous to the health of the individual than is the open country, for he is so much more exposed and helpless as regards dangers arising from the acts of others. Life on the farm, while perhaps not nearly as hygienic as it should be and could easily be made, is, nevertheless, quite different in this respect from city life. An isolated family in the country may indeed endanger its own existence by ignorance and carelessness in matters of hygiene, but, generally speaking, it is neither a source of danger to other families, nor is it sub-

ject to dangers to its health from the acts of such other families. In fact, many acts and omissions which in the country have little or no element of danger to health become in the city very serious menaces, not only to those who are guilty of them, but to a very large number of innocent and unprotected persons as well. If city life, therefore, creates and increases many of the dangers to public health, it is only proper that the city should take special pains to meet and minimize those dangers.

Unfortunately, this peculiar obligation of the city as regards the protection of the health of its inhabitants is one that received but tardy recognition, and is today perhaps one of the most neglected fields of public activity, at least in most American cities. Practically all effective public health work is a product of the latter part of the last century, and the most effective measures are the result of very recent years. This tardiness in attacking the problems of public health administration is due, of course, primarily to the fact that the development of sanitary science itself is such a comparatively recent matter. Until medical science had discovered the causes of the diseases which made the urban death rate so astonishingly high, little progress could be made in preventing them. But progress in public health protection has not by any means kept pace with the progress made in medicine. Long after the causes and manner of transmission of our most serious diseases were well established, and it was no longer a matter of doubt as to how they might be reduced, health departments continued to ignore the problem of prevention and contented themselves with the abatement of nuisances and the heroic fighting of epidemics that might have been prevented. The keynote of the modern city health program, as contrasted with that of most cities up to the present, is *prevention*. Just as

in the case of the problem of fire protection, a dollar spent on prevention saving many dollars needed for fighting fires, so in the case of the public health, the old adage of an ounce of prevention being worth a pound of cure is but a conservative statement of a very evident and convincing truth.

In all branches of health activity today, therefore, the element of prevention should receive the lion's share of attention. The problem of treating and curing individual cases of sickness is in reality only secondarily a problem of health administration, for that is left largely to private physicians. It is only if such treatment is not accorded that the case presents a public aspect, either because of the necessity of preventing the spread of contagious diseases or of preserving the health of an individual who is unable to provide for himself the necessary medical attention. Most of the space devoted to the consideration of public health administration in this chapter will, therefore, be taken up with a consideration of the preventive activity of health administration.

Foremost among the preventive measures that must be undertaken by every city health authority is the insurance of the purity of the food supply of the city. So much sickness and death is directly traceable to impure water, milk, and other foods, that the purification of the food supply presents at once one of the most stupendous and promising fields of preventive endeavor. Most universal and absolutely indispensable among human foods is water. Unfortunately, it is at the same time one of the most easily polluted, and when polluted one of the most dangerous of human necessities. The list of water-borne diseases is very large, but foremost among them must be placed that terrible scourge, typhoid fever. So generally is typhoid fever caused by impurities in the drink-

ing water that the condition of the water supply of a city can be fairly judged by the number of typhoid fever cases that exist.

Water in its ordinary and most accessible state, that is, in watercourses or lakes, is almost never free from disease germs. The reason for this is that human wastes, the harborers of typhoid fever and intestinal disease germs, are almost always, except in cities having sewer systems, carried off by surface waters into streams and lakes. Even city sewer systems commonly empty into such bodies of water and add enormous pollution to the water which may be used by other cities situated below. Most cities are dependent for their water supply on surface water, as wells will rarely suffice to furnish the water needed for a city. It follows, therefore, that almost all cities are in danger of getting polluted water, a danger which the city itself must guard against. Purification of the supply of drinking water is, consequently, in most cities a necessity, and becomes increasingly so with the increasing density of population.

The various methods of purifying the city's water supply will be touched upon briefly in another chapter. It is necessary to point out here merely that the first step in the protection of the public against impure water is the careful, frequent, and continuing examination of the water by the city health authorities. The presence of disease germs in water can easily be discovered by proper scientific tests, which, however, demand a properly equipped laboratory and an expert bacteriologist. If the water supply is not pure, that fact can be discovered at once in this way, and the users, at least, be warned to purify their own drinking water by boiling, if the city neglects its obligation to see that the drinking water of its citizens is pure. This would seem to be so elemental

and necessary a means of protection that one wonders how any city can be without it. Yet, even of the larger cities, only comparatively few have adequate bacteriological examinations of the water supply.

Disease germs, though the most serious menace to public health lurking in the water, are not the only objectionable features that may have to be overcome. Water bacteriologically pure may be chemically injurious and unfit to drink. In that case proper measures for treating the water from that point of view must be employed. The water supply may also be objectionable from the point of view of use for domestic or industrial purposes, but so far as it does not contain a menace to the public health these features need not here be taken into consideration.

It must be pointed out that the burden of purifying a water supply is sometimes greatly increased for a city by the action of individuals or of other cities over which it has no control. One of the commonest sources of pollution of a city's water supply, for instance, is the contamination resulting from the emptying of sewage by another city into the stream or body of water from which the city in question gets its supply; or factories may be located in such a way as to pollute the water with their wastes, and so make it quite unfit for drinking. Obviously, a city in such a position is subjected to an unnecessary and unfair hardship with which it is unable to deal. In such cases action by the state will be required to protect the purity of water supplies, or it may even be that federal interference will be necessary where the source of pollution and the source of supply are in different states. The unfairness of the extra burden imposed in this way is, of course, a good ground for demanding remedial legislation by the state, but it does not

in any way absolve the locality adversely affected from the obligation of taking the necessary steps for making the water fit for drinking before it is distributed to the citizens. As will be seen later, water in almost any condition can be purified sufficiently to make it fit for consumption, though the financial burden may have been increased unnecessarily.

The intimate connection between the water supply of the city and the health of its inhabitants, coupled with the fact that negligence in management of the health aspects may result in incalculable disease and death, has led to a general agreement that the city itself should own and operate the public water supply. Private sources of water supply were formerly common both in this country and in Europe, and today in very small cities water is not infrequently supplied by private corporations operating under a franchise. Usually, however, the first utility to be taken over by a city when it begins to grow is the waterworks, and properly so. The policy of municipal ownership and operation of the waterworks is, therefore, a sound one, quite distinct from the general policy of municipal ownership of public utilities, which will be touched upon in a later chapter.

Next to water the article of most universal food consumption in cities is milk. In its capacities as a disease carrying medium, moreover, milk need not yield even to water. The ravages of milk-borne diseases, furthermore, are most terrible among infants, the most helpless, and yet for future generations, the most important portion of the population. Just as the purity of a city's water supply can be judged by the cases of typhoid and other water-borne diseases, so the purity of the milk supply can be measured by the infant mortality in the city. In the one case, as in the other, the efficiency of the health

department is on trial, for prevention is attainable in both cases.

The milk problem in cities is complicated by the fact that the source of supply, that is the dairy herds, are generally outside of the city limits, and in the case of large cities are frequently many miles away, it may even be in another state. The control which the city exercises over the production of milk must generally, therefore, be indirect. That is, while the city has no jurisdiction to compel inspection of milking places outside its limits, it may accomplish the same results by forbidding the sale of milk in the city unless it comes from inspected places. No milk should be allowed to be sold in the city without a license, and the issuance and continuance of a license should be dependent upon complying with all the conditions of inspection and sanitation.

The journey of the milk from the cow to the consumer is fraught with more pitfalls and dangers to the public health than can easily be imagined. At the very outset, the condition of the cow herself may make the milk a serious menace to the consumer. Tubercular cows may transmit the terrible white plague to all the babies that feed on their milk. Fortunately, science has discovered a simple and effective tuberculin test for determining whether or not cattle are afflicted with the disease. Frequent and careful tests are, therefore, demanded even before the milk is drawn from the cow. These must, for absolute security, be made by city inspectors, no matter where the herd may be.

Even in the process of being drawn from the cow the milk is in the greatest danger of being polluted. From that time on, however, until the milk is actually consumed, practically all dangers to public health can be avoided by the simple observance of cleanliness. The

extreme susceptibility of milk to dirt and filth of all kinds, including a large number of disease germs, can be counterbalanced only by extreme cleanliness in the handling of the product. If milking machines are used, the greatest care must be taken to see that they are sterilized. If milking is done by hand the clothes and hands of the milkers must be scrupulously clean. The receptacles into which the milk is put must be thoroughly sterilized and protected against flies and dirt. The condition of the milkers themselves must be examined, for cases of scarlet fever and other like diseases have been caused by germs introduced into the milk by a milker who was either himself afflicted with the disease or was a carrier of germs from some member of his family.

The rate at which germs multiply in warm milk makes it necessary to cool the milk at once after milking, and it should be kept at a temperature of not more than 50° F. until consumed, in order to retard the bacterial multiplication. One great danger arising from milk that has to be transported a considerable distance is due to the use of dangerous preservatives. Formaldehyde and other dangerous chemicals are commonly used as preservatives in milk that is shipped into cities. Inspection of the dairies is, therefore, not sufficient. Watering of milk, more serious as a dangerous means of unintentional pollution than as a species of intentional fraud, is commonly practiced while the milk is *en route* to the city or on the delivery wagon. In order to protect the consumer, therefore, tests must be made of the milk actually on the wagons and about to be delivered to the consumer. Such tests will disclose the presence of chemicals, of dirt, and of disease germs, and must be resorted to almost continually if they are to furnish anything even approaching an adequate safeguard to the consumer. The

strict enforcement of the sanitary requirements with regard to the production and sale of milk is absolutely essential, and the revocation of licenses with additional penalties for violating the ordinances are the only effective measures for safeguarding the public health.

The question may well be asked whether the milk supply of a city is not quite as proper a public undertaking from the public health point of view as is the water supply. The difficulties of inspection and enforcement are very great and the expense is enormous, while the results of laxity or carelessness on the part of the health department are appalling. It would seem, therefore, that a municipal milk supply is quite as logical as a municipal water supply. Yet such an undertaking is almost unknown, though some cities have gone so far as to institute public milk stations for the babies of the poor, insuring them a pure supply of milk. The technical difficulties of managing a dairy farm are scarcely greater than are those of administering the waterworks, and the improvement of the public health would be quite as marked. That may be looked forward to as one of the promising developments in municipal health administration in the near future.

The ice supply assumes, during the summer especially, an important place in the city's food economy, and has an important bearing on the public health. In the first place, the ice itself is used in water and other beverages to a very large extent in the United States. Such ice is frequently natural ice cut from lakes and ponds in the winter and stored in ice houses until needed. The water in these lakes and ponds is in many cases unfit for drinking, and yet is introduced in the shape of ice into the beverages and there melts, polluting the drink, for the disease germs that lurk in water are not affected

by freezing, but simply lie dormant ready to become active as soon as the ice again melts. Obviously, it is futile to guard the ordinary water supply of the city and permit it to be largely polluted in the summer by impure ice. Inspection of all sources of ice whether natural or artificial is, therefore, a necessary part of safeguarding the drinking water of the city. But ice has still another important though indirect bearing on the purity of the city's food supply. Food of all kinds, and especially milk, becomes unfit for consumption very rapidly in the hot months unless kept cool by means of ice. This is true of the food both before and after sale to the consumer. If milk is not kept cool between the time of delivery and the time of consumption, for instance, the consumer may suffer as much as though it were not fit for drinking when delivered. In the case of the poorer classes the cost of ice may be prohibitive, and the condition of their milk and food, therefore, be a menace to health which they are unable to guard against. Regarded merely as a protection to public health, therefore, and not as a measure of social amelioration, the city should be concerned in seeing not only that ice is pure but also that it is cheap. Perhaps the best way of accomplishing that end, too, is for the city to undertake the manufacture and sale of ice. Such projects are already in operation in some American cities, and seem to be gaining in popularity. They seem to present no great financial difficulties, especially where they can be combined with municipal electric light plants, as an economical use of the two plants can be effected.

The meat supply of the city presents another serious pure food problem. The condition of the animals that are slaughtered, the handling of the meat from the slaughter house to the market, and the condition of the markets

themselves all present numerous possibilities for serving the public with meat that is not fit to eat. A number of very serious diseases may be communicated to human beings from diseased animals that have been slaughtered for consumption. Some of these diseases can best be detected by an examination of the animals before being slaughtered, others are best discovered by examining the viscera after slaughtering and some of them cannot be discovered at all by inspection of the meat only at the meat market. In addition to diseases of the animals themselves, the meat may be contaminated by dirt and disease germs or by decomposition. Cleanliness in the slaughter house, proper dressing and cooling, cold storage facilities, are all requisite for keeping the meat fit to eat until sold to the consumer. For this purpose, inspection at all stages of the handling is necessary. As in the case of the milk supply, so in the case of the meat supply, the city can insist upon proper inspection of animals slaughtered outside of its territorial jurisdiction by forbidding the sale of meat except under a license conditioned upon submission to adequate examination in the entire process of preparation. A large force of technical inspectors is required for this branch of the food inspection service as well as for the milk inspection. Adulteration by preservatives intended to retard the decomposition of meat is a serious source of danger, particularly common in the case of sausage meat, which is frequently quite unfit for consumption. The condemnation and destruction of unfit meat and the severe punishment of offenders against the food ordinances are necessary means of enforcing the requisite protection.

The disgusting and insanitary conditions to be found existing in connection with most slaughtering establishments in our cities have already led a few progressive

American municipalities to establish municipal slaughter houses, a utility that has for a long time been the object of municipal activity in many European cities. The sound reason of adequate public health protection is as applicable here as in the case of the water and milk supply. With the public health consideration primarily in view, it becomes a matter of secondary importance whether or not the undertaking will prove commercially profitable. That a municipal slaughter house can be made to yield even a money profit has been demonstrated by cities not only in Europe, but in this country as well, but as compared with the protection to health and the cleanliness afforded, the commercial element becomes insignificant. As well might one stop to inquire how much revenue the city obtains from its police department before agreeing to establish such a department, if, as seems to be the case, the adequate control of the meat supply from a sanitary point of view is feasible only through the establishment of municipal slaughter houses.

All of the other articles of food that are sold in the city are to a greater or less degree possible sources of danger to the public health. Adulteration, lack of cleanliness in handling, and decomposition are contributing factors in making the food supply potentially dangerous to public health. Groceries, bakeries, public eating places, ice cream parlors, are all possible sources of sickness, which need to be regulated and inspected. Municipal markets, a very old municipal activity in Europe and one by no means unknown in American cities, though to a much less extent, undoubtedly present an advantage from the public health point of view. It seems to be the case, however, that the sanitary aspects of ordinary market wares other than meats are not so complicated, and the danger is consequently less. The case for municipal markets would

seem, therefore, to rest more largely on social and economic grounds, and to fall properly under another head of municipal activity. One very serious menace to public health through the food supply lurks in the canned foods that are so generally consumed. These foods are prepared outside of the city and their manner of preparation cannot therefore be supervised by the municipal health authorities. They can, however, be subjected to frequent inspection by samples and, by throwing the loss of the condemnation of unfit canned goods on the merchants handling them, their interests will be a strong factor in demanding proper canned articles. It is not safe either in this case or in the case of dressed meats for cities to endanger the health of their citizens by relying on inspection by United States officials. The Pure Food and Drugs Act furnished no guarantee against unfit canned goods, and government inspection of meat for interstate shipment has not prevented doctored meat from being shipped and sold. Every city has an individual obligation to take all possible precautions on its own account.

Next to the insurance of a safe and pure food supply for the city's inhabitants, perhaps the greatest task of the city's health department is the care for the general sanitary conditions of the community. Under the designation of the abatement of nuisances, local authorities exercised a sort of sanitary power from early days. But so greatly has our knowledge of the intimate connection between dirt and disease increased in recent years, that conditions which were formerly not regarded as nuisances at all, and so were permitted to continue, or that were considered as nuisances chiefly because they were objectionable to the smell, are now attacked as being absolutely incompatible with public health protection. The fly, for instance, which was long popularly regarded as

a nuisance, is now regarded as one of the most serious of menaces to public health. The list of serious diseases which flies are today known to carry to human beings is staggering, and every modern health authority makes one of its first undertakings a campaign against the fly. The manure pile or rubbish heap which formerly offended merely the eye or the nose is today regarded as infinitely more objectionable because it is the breeding place of flies. A campaign against filth and dirt in the city is, therefore, not to be regarded primarily as a beauty campaign, but rather as a health campaign. In the same way, our attitude toward the mosquito has undergone a change. While mosquitoes have always been regarded as nuisances and pests, cities never undertook their extermination until medical science showed that yellow fever, malaria and other diseases are carried by mosquitoes to human beings. We know today that malaria is communicated from one individual to another solely by means of the mosquito. We know that mosquitoes breed only in water, and that if all marshy places are drained or oiled and all receptacles in which water collects are emptied, screened, or oiled, mosquitoes cannot breed. If there are no mosquitoes there is no infection with malaria. Therefore, if a city is malaria ridden, we no longer blame the climate but the health department. Tin cans in vacant lots are an eyesore, it is true, but much more serious is their character as mosquito incubators.

Flies and mosquitoes are not the only animals that are known to endanger public health. Vermin of all kinds are the products of filth, and filth means breeding places for germs and sickness for the community. Rats have long been known to transmit bubonic plague by the fleas they carry, and recently they are being charged with other serious counts of a like nature. Even domestic

animals are being brought under the ban, as science discovers the part they play in disease transmission. Cats are now regarded sufficiently dangerous to justify health departments in issuing warnings with regard to the dangers to children from these household pets. Horses, cows and other domestic animals are coming to be considered unsafe inhabitants of the city because of the difficulty of dealing with their manure. The supplanting of the horse by the automobile may therefore be regarded as a fortunate development from the sanitary point of view, as well as from the point of view of street paving and cleaning possibilities.

In general, therefore, it may be seen that the modern health department is concerned with preaching and practicing the gospel of cleanliness. In all that belongs to the city itself, streets, public buildings, parks, etc., the utmost cleanliness should be observed both as a measure of protection and as an example to private citizens. Public service corporations and individuals should be held up to an equally high standard of cleanliness. If that is done the public health problem has been enormously simplified at the most vital and effective point. A very fundamental and indispensable part of this work of the health department is a campaign of education. The most elementary facts concerning the relation of dirt to disease are still wholly unknown to the great mass of people, and until known cannot become effective in improving conditions. Modern health departments are therefore devoting a great deal of attention to the problem of reaching the mass of the people with literature containing lessons in hygiene, both personal and social.

A rather recent development in the public health field has been the effort to eliminate unnecessary noises in the city. Medical science has discovered the serious conse-

quences that may result from uninterrupted noises, even for people who are well, to say nothing of those who are sick. Much of the noise of the city is, of course, inevitable, but it is astonishing how much of it is easily avoidable. By prohibiting unnecessary noises the city health authorities are contributing directly to the improved physical condition of the inhabitants. Factory whistles, railroad whistles and bells, hucksters of all kinds, organ grinders and other disturbers of the public quiet are being put under strict regulation. Even roosters, a rural delight all too frequently injected into city life, must now have their vocal cords cut in a certain progressive city. The elimination of these and other wholly unnecessary noises will do much to diminish the shattered condition of nerves which is commonly supposed to be the inevitable result of long years of living in the city.

Pure air, one of the most fundamental conditions of physical well being, is much more largely attainable in our cities than is commonly the case or is even thought to be possible. The chief sources of air pollution are the dust from the streets and the smoke from chimneys. Street cleaning, therefore, becomes an important public health function. Tuberculosis and all sorts of throat and nose troubles are spread about in the dust flying in city streets. This danger could, it is true, be largely diminished if the general rules regarding expectoration were enforced. But as they are virtually never enforced, and general public opinion seems to countenance their non-observance, it becomes necessary to protect the public health by keeping the streets clean and free from dust, an expensive but simple undertaking. In most of our industrial cities, and all cities are more or less industrial, the smoke nuisance is a very serious source of pollution of the air. This has been attacked with considerable

success by some cities, but in the majority of cases it is still quite neglected. When it is remembered that tuberculosis demands for its cure fresh air treatment in pure air and that the vast majority of persons afflicted with the disease are unable to leave the city for treatment, the significance of pure air in our cities from that point of view alone becomes apparent.

One of the most difficult of sanitary problems raised by the concentration of persons in cities is that of the disposal of human wastes. In the country a dry closet at a distance from the house has always answered all purposes, though even there disease was spread by this means of waste disposal. In the city, however, this primitive method of sewage disposal is out of the question. It was practiced, indeed, for many centuries, but that was before the dangers to public health involved in that method of dealing with the problem were realized. Today it is generally recognized that the existence of dry closets in a city is an evidence of medieval health conceptions, though in this respect the cities of Europe are even more backward than those of the United States. Cesspools were an improvement over the old dry closet, but in crowded cities they were also objectionable from every point of view, and the city realized the necessity of collecting the sewage by means of sanitary sewer systems and disposing of it in some way. The different methods of sewage disposal and some of the considerations to be kept in mind in the construction of a sewer system will be touched upon in a later chapter. Here it is desired merely to point out that a city which does not provide and compel sewer connection in every house is extremely backward in one important phase of public health activity.

A somewhat similar problem is raised by the collec-

tion of garbage, that is, unused food remains which are thrown out by householders. They not only become extremely objectionable to the smell but offer ideal breeding places for flies and so constitute a serious source of danger. Their collection and disposal are therefore a necessary municipal activity, though in most cases one that is not properly attended to. The difficulties involved in the collection and disposal of garbage and other wastes are primarily of an engineering and financial character, but the consequences of a neglect to solve them properly make themselves felt chiefly in the domain of public health. Their importance may therefore properly be pointed out at this place even though a discussion of the best manner of their solution arises properly under the head of public works.

A modern development of the greatest importance in the field of public hygiene is the medical inspection of school children. This is not merely or even primarily for the purpose of detecting contagious diseases among the children, though in that regard an important service is performed, but rather to examine their general physical condition. By insisting on the treatment of many minor ills that result in undermined health later, the physical condition of the next generation can be greatly improved at the outset, thus increasing the power of resistance to disease in general. Defective teeth, weak eyes, infected tonsils, adenoids, are a few of the common ailments from which children suffer and which, if not attended to, are the cause of increasingly impaired health and vitality in later life. To look after these ills is therefore the part of wisdom of the city that cares for the health of its citizens, present and future. The remedying of the ills mentioned has a great educational significance as well, for the retarding effect of such defects

on the mental development of the child is now universally recognized. Fundamentally, however, it is a problem of public health, and should be envisaged as such, though coöperation by the school department and assistance out of the educational fund would be most desirable.

But the public health activities of the modern city begin even farther back than childhood. They reach back to the infancy, birth and even prenatal care of the future citizen. At this stage, especially, does ignorance throw a blighting curse on the unborn generations. If a city health department, through literature and visiting nurses and doctors, instructs the prospective mothers in the most fundamental facts of caring for themselves during pregnancy, it is not merely the health of the mother which is safeguarded, but, what is even more important, the unborn child starts with enormously better chances of life and health. In the same way at childbirth, not only do many women and infants die unnecessarily at this time, but a very large percentage of the blindness that exists today is due simply to the failure to take such an elementary precaution as washing the infant's eyes out with a proper solution at birth. Then after that period is past, the first year of the infant's life is attended with more danger of disease and death than is any subsequent year until old age, and much of this danger can be avoided through the simplest kinds of hygienic precautions. For the large portion of the community that cannot afford to pay for the services of a good private doctor or nurse, it is essential that at least the information be furnished them which will enable them to take the fundamental precautions, and when medical aid is necessary, that that aid be available. Anything less than that would place the city in the ridiculous position of spending a great

deal of money each year in dealing with sickness which might have been prevented at much less expense if dealt with at the proper time. City lying-in hospitals and baby hospitals are therefore not to be regarded as primarily charitable or social welfare institutions, but as means of taking precautions against future sickness, at the time when such precautions count for the most.

The treatment of contagious diseases was one of the earliest forms of public health activity to develop. Indeed, it was the decimating epidemics of the nineteenth century which were directly the cause of the establishment of health departments in our larger American cities. Now that the causes and means of transmission of so many epidemic and contagious diseases are better known, the fight against epidemics can be much more effectively waged. Indeed, a good part of the preventive work which has been discussed above is directed against epidemic diseases. But, in addition to removing the fundamental causes of the occurrence of such diseases, the spread of individual cases must be prevented. This requires a careful system of notification of all cases or suspected cases of contagious diseases to the health authorities, isolation, fumigation, and other methods of disinfection. Where the duty of placarding houses with contagious disease signs is imposed upon the private physicians, experience shows that the selfish interests of the physician are not always the same as the larger interests of the community. Even in the matter of keeping children home from school, the physicians too frequently take the parents' point of view instead of that of the other children. Strict penalties and careful inspection by the health officials are necessary to enforce this obligation of the attending physician. Every city should have an isolation hospital for contagious diseases, because many cases cannot be treated

at home in such a way as to avoid the danger of spreading the disease.

In the protection of the city against the introduction of contagious diseases from the outside, the city should be aided by state law and state officers. With the enormous amount of traffic coming into modern cities, effective measures of quarantine are almost impossible without the aid of state action in the district from which the disease is likely to be introduced. At the same time the city should do whatever it can of its own initiative to guard against the introduction of contagious diseases from the outside. Some of the commonest means by which contagious or infectious diseases are spread about in the city are laundries, barber shops, public wash rooms and public drinking cups. Diseases may be transmitted from the clothing of one patron of the washerwoman or the laundry to another, or may be communicated by diseased employees themselves. Various skin and blood diseases are communicated by barbers' implements, and the same is true both of the public towel and the public drinking cup. Inspection of the employees and individual treatment of the clothes can minimize the danger from laundries and washerwomen. Sterilization of towels, razors, strops, and brushes can be insisted upon in the barber shops, the issuance or continuation of the license being made dependent upon the observance of the sanitary requirements prescribed. Individual towels or paper rolls should be made to take the place of the former common towel, and the sanitary fountain or individual drinking cup are in all modern localities supplanting the former insanitary arrangements.

All of these various activities of the modern health department are but a partial enumeration of the matters that fall under the care of the guardians of the public

health. They serve, however, to indicate the wide scope of action that calls for attention by that branch of the city's administration. Of course such a tremendous undertaking requires a great deal of money, and yet municipal health departments are among the most poorly supported of the city's activities. The returns from a well-directed department of public health are, of course, not easily demonstrated in terms of dollars and cents. But even using a very conservative, albeit materialistic, estimate of the economic cost of preventable sickness and death, it has been shown that the annual saving effected by proper public health protection will in every city far exceed the cost of maintaining the best equipped and operated public health machinery. Quite apart, therefore, from the sentimental value of life and health, an efficient health department is a paying proposition from a large point of view. The failure to realize this fact is perhaps largely responsible for the difficulty health departments commonly experience in securing from the city's revenues enough money to carry on the work properly.

There are a few problems of organization connected with the health department which deserve a passing mention because they are intimately connected with the efficiency of the health work. Quite generally health authorities in American cities have not been given adequate powers for carrying on their work. Health authorities which merely advise but cannot determine or act are virtually useless. The determination and enforcement of the measures necessary for safeguarding the public health are technical, not political, considerations, and that determination should therefore be left to a technical and not a political authority. For that reason the sanitary regulations of the city should be issued by the health

authority, not by the representative body. For the same reason the health authority should be intrusted to a single individual or small executive commission instead of to a large board. Lay opinions may be worth receiving at times, and lay advisory members may profitably be employed, but the measures to be adopted for meeting such a situation as arose recently in New York City at the time of the infantile paralysis epidemic are not a proper subject for lay deliberation and determination. If the head of the health department is a properly trained sanitarian he is much more to be trusted, especially in emergencies, than is any large board intended to be in any sense representative. Defective organization is certainly in part responsible for the inefficiency of many of our city health departments.

Discipline and ascending concentrated responsibility are most necessary for the effective working of the health authority. Appointment on the basis of merit alone is, of course, equally desirable, and we have here again the problem of insuring responsibility and power to the authority in charge and yet limiting his discretion so far as necessary to prevent improper use of his powers of administration. Positions in the city's health service are for the most part of a nature to be especially adapted for filling by competitive civil service examination, as they are of a technical nature. At the same time retention in the service must be made dependent upon prompt obedience, an absolute essential in the most important emergencies calling for action by the health authorities. Therefore, the power of discipline, meaning in the last analysis the power of dismissal, must be intrusted to the responsible head of the health department with large discretion.

Another question arises in connection with the relation

of local health authorities to the state health department. It is clear that under modern circumstances insanitary conditions in one city may be of the greatest menace to a neighboring city unable to protect itself except at great and unnecessary expense and inconvenience. For that reason, the city must look to the state for protection. Certain minimum requirements may properly be prescribed by the state for all cities and an administrative supervision exercised by the state over the local authorities charged with carrying the provisions into effect. In European countries, even in England, the local health administration is subjected to a more or less strict supervision by the central government. The same safeguards will have to be introduced in this country if cities are to be protected against dangers to public health arising outside their limits and not under their control.

It would not do to leave the subject of public health administration without dwelling for a moment on the importance of keeping careful vital statistics, particularly birth statistics and death statistics with careful statements of the causes of the deaths that occur. Without such statistics it is impossible to judge of the sanitary conditions of the city and to discover where the leakage occurs. As we have seen above, prevalence of typhoid is an indication of impure water, a high infant mortality indicates an impure milk supply, malaria shows that there are undrained places or other mosquito breeding spots not cared for, and so on down a long list of the commonest diseases. If, however, there are no careful records of such diseases, the symptoms are undiscovered and the treatment of the conditions cannot follow. As the vital statistics are important from many other points of view as well, it seems proper that cities should be required by state law to keep vital statistics in a uniform way and send copies of the

statements to the state health authority. In this regard the cities of Europe are in general far in advance of American cities, many of which lack even the beginnings of adequate health records. Of course it makes little difference whether the collection of these statistics is made a part of the function of the health authority or of some other municipal department such as the police, for instance. From the point of view of public health protection it is certainly important that in some manner or other they be collected.

CHAPTER IV

PUBLIC EDUCATION

The field of public education presents one of the few branches of municipal activity of which American cities in general have some reason to be proud. Not only were American cities among the first in modern times to provide free public school facilities, but from the point of view of citizen interest and support and the ever wider extension of the public school facilities, American cities have always been in advance of those of England, for instance, which in so many other respects can be studied with profit by our municipalities in this country.

It is now recognized in all civilized countries that it is one of the most important duties of the state to see that opportunities for education are extended to all the citizens of the state. From the beginning of the recognition of this duty, it has also been agreed that the city represented a logical unit for administering this function, and from the first, therefore, we find the provision of public education among the municipal functions. The machinery employed for that purpose and the relation between the local authorities and the state present some interesting variations and problems which will be touched upon later in the chapter, in considering the question of organization. For the present it is intended to examine

into the character of the education which the city is supposed to furnish.

The earliest concepts of the extent of free public education included merely what we today designate as elementary education. Generally speaking, this concept involved the provision of free schooling for children between the ages of six and fourteen years. This is also commonly known as the scholastic age, the time during which attendance at these free schools should be made compulsory. Today, however, the limits within which free educational opportunities are offered to children have been considerably extended, both above and below the earlier periods. Just as elementary education was formerly left to private or church endeavor, so after elementary education, in the sense defined above, was assumed by the cities a preliminary educational function was developed by private initiative. This was the so-called kindergarten. The development of the kindergarten as an educational agency resulted from the recognition of the fact that the mental and physical powers of the child could with profit be trained some years before the age at which children were expected or permitted to enter the primary grades. Though at first little more than day nurseries, these kindergartens gradually developed into very valuable educational agencies, until today it is recognized that the child who has had two or even three years in a scientifically conducted kindergarten is distinctly more advanced and mentally capable than is the same child entering the grades without any preliminary training. As a result such children are frequently able to shorten the period of elementary training without the slightest detriment to their health. With the recognition of this fact came the realization that if kindergarten training was a valuable preliminary to the ele-

mentary grades, it was the business of the city to make its elementary education more effective by providing also for this preliminary training. Consequently we see the movement for municipal free kindergartens spreading from city to city until it may be hoped that every city will recognize its importance in the educational system of the community.

At the other end, the concept of what public education should include has been extended in almost all American cities by from two to four years in what is commonly called the public high school. Thus secondary education, which, until comparatively recent times in this country, has been pretty largely in the hands of private or church academies, is now almost universally regarded as a part of the free public school system which every city should provide for its children. Furthermore, the standard four-year high school has already in some cities been extended by two years into what is known as the junior college, offering to the city children the educational opportunities of the first two years in college. Indeed, cities have not stopped there in their systems of schools. In New York, Cincinnati, Akron, and Toledo we find cities providing full collegiate training in standard colleges, free of charge, to the young men and women of the city, and still other projects for municipal institutions of higher learning are on foot. Thus we see that modern municipal education in progressive American cities extends from babyhood to manhood and womanhood.

Not only are the benefits of general schooling so well recognized that the opportunties for at least the elementary grades are both free and compulsory, with additional free schools of higher character, but even free textbooks and free lunches are being furnished in a number of

cities in order to diminish the financial burden imposed upon the poorer classes in sending their children to school. Thereby is increased the extent to which the educational opportunities of the city can be taken advantage of, especially by those who are entirely dependent upon community action for supplying their children with such opportunities.

The three most important factors in providing a satisfactory public school system for a city are a proper curriculum, an efficient teaching force, and an adequate physical plant. In the matter of adapting the school curriculum to meet changing needs and educational concepts, local educational authorities have unfortunately not been as responsive as they have been in providing schools and teachers. It is, perhaps, especially true in educational matters that what has been is likely to be regarded as therefore correct and that the educational curriculum which the school authorities themselves knew and grew up under seems to them naturally the proper thing for the rising generation. The changed conditions of modern society, as well as the development of the science of education, have wrought such changes, however, in the last generation, that it is safe to say that the school system which is teaching the city children the same things in the same way as it taught their parents is some twenty years behind the times. In the first place, as to the manner of instruction, the modern school no longer overemphasizes the development of the memory to the neglect of the other faculties. On the contrary, powers of observation and powers of reasoning are the main points of emphasis today. Memory is trained as an aid to the other capacities, not as an end in itself. In the second place, modern education is beginning to recognize the differences between children. Most adults

today went through schools in which large numbers of children were treated as a unit supposed to represent the hypothetical "average child." As a consequence of this the children who were not up to this standard, which, it may be pointed out, was almost always much nearer the lowest level of intelligence in the class than the highest, were dragged along in a disheartening struggle until forced to drop by the wayside and lose an entire year in going over the work again. Exceptionally capable children, on the other hand, found no interest or incentive in the slow pace at which things were going, and not only wasted many precious hours of time, but frequently developed habits of indifference, carelessness, and indolence which handicapped them in all subsequent undertakings. Today, scientific education involves the recognition of those differences among children, their examination, and a treatment that takes them into account. The subnormal child, for instance, which formerly presented such a problem to the teacher of a large class, can today be discovered by scientific tests and be especially dealt with, to the great advantage of himself, the teacher, and the other children. Small classes which permit individual attention to the children and a system of promotion or demotion based upon graduated standards of ability, instead of upon arbitrary divisions into years, are, therefore, earmarks of the modern school system.

Along with the fundamental question of how to teach, arises the question of what to teach. School curricula are handed down from generation to generation without any critical examination as to their value or their adaptation to human needs and are accepted just because they have been used for years. But, as was suggested above, the fact that certain subjects have always been

taught in schools should be a source of suspicion rather than a recommendation, for the origin of the school curricula in common use today dates back to a time when industrial and economic conditions generally were wholly different and when ideas as to what education is were quite different from what they are today. A modern school curriculum should be based on a critical examination of every subject included and no subject should be admitted which cannot be shown to have real educational value. The fundamental three "R's," reading, writing and arithmetic, are obviously the tools of all further education and need no further justification for their place in the curriculum. Beyond that, however, subjects should be admitted with care and only on examination. If education means adaptability to surroundings, and it should mean that whatever else it may mean, then a knowledge of the everyday phenomena of nature, physiographical, astronomical, physical, chemical, biological and physiological, taught, not as abstract sciences, but as pragmatic experiences, must certainly be given a place in the curriculum.

The mind is not, however, the only attribute which modern education seeks to develop. The body, the dwelling place of the mind, is equally important. Physical education, therefore, is receiving a larger and larger part in the educational curriculum. Not only does the strengthening of the body react favorably on the health of the child, but the amount of mental development that can be accomplished is actually increased when periods of study are interspersed with periods of play. Carefully directed and supervised play, furthermore, develops the moral nature of the child by teaching him the principles of self-control, fair play, and sportsmanship. This moral nature should further be developed by instruction in the

principles of right and wrong, particularly social ethics. It is one of the indictments against democracy, particularly American democracy, that our citizens lack the social sense. It should be one of the most important functions of our educational system to teach children respect for law and order, the subjection of the individual to the welfare of society, and the larger social consciousness. To neglect instruction in such matters, commonly termed "civics" in the inadequate manner in which they are handled, is the most shortsighted of educational policies. Instruction along these lines should begin at the very beginning and run through the entire curriculum if we are to turn out promising material for the making of good future citizens.

Closely connected with the training of the moral and social nature of the child should be the development of his esthetic faculties. The beautiful in literature, art, and music should be brought to his attention and his understanding thereof developed in a vital and interesting way. So far as these subjects are today taught in our schools they are all too commonly handled in such a way as to kill the interest of the child rather than to stimulate it. Particularly is this the case in the teaching of literature, where pedantic analysis and dry dissection destroy so completely the beauty of the subject that most children develop a distaste rather than a liking for the masterpieces of writing.

With the subjects outlined above accorded their proper attention it will be found that the broad general foundations of an education will have been laid. Little or no time will be left for the monstrosities of present-day elementary curricula, grammar, algebra, geometry, languages, to name only a few.

The mistake most commonly made in our public school

systems is to continue what is called a "liberal" education beyond the time when it has ceased to be the kind of education most needed. Our ordinary high school curricula continue this same kind of instruction for another four years after the elementary grades, in apparent ignorance of the fact that a very large percentage of school children do not go through the high school at all, largely because they realize that the high school training will help but little in the struggle for a living upon which many of them must enter with their fifteenth or sixteenth year. In other words, there are two sides to education. One, which has aready been considered, is the general adaptability and fitness of the individual toward his surroundings, the other is the special training for doing the particular kind of work in the world upon which the individual must depend for a livelihood. Now the children that finish the elementary grades are commonly without the slightest kind of training that will specifically aid them in earning a living at some particular job. And yet many of them must, from economic necessity, go to work when they graduate from the elementary school. These are the children who most largely remain in the city in which they live and become permanent wage earners there. Their economic welfare is therefore a matter of immediate concern to the city and this economic welfare is dependent largely on the training they have received for earning a living. Obviously, then, the entire period of elementary education must not be devoted to purely "liberal" subjects or subjects developing a general adaptability; it should include also to some extent subjects calculated to furnish a specific adaptability for a particular kind of economic activity. This is the much discussed problem of vocational education.

Some recognition of this principle of education has

been accorded in recent years in this country by the introduction of courses in manual training and domestic science in our elementary schools. But, for the most part, the work has partaken but little of the character of real vocational education and much needs to be done before this need will be met. The characteristic opposition of educational authorities to these so-called "fads" has prevented even this modest beginning from being everywhere accomplished.

Much the same problem, but in an accentuated degree, arises in connection with the secondary or high school curriculum. If it is true that only a portion of the graduates of elementary schools go on to the high schools, it is even more true that but a small proportion of those who enter high school graduate and go on to college. The ordinary age of graduation from high school, about eighteen years, marks for the great majority of boys, at least, the time at which they must cease to be consumers merely and must become producers. In pathetic blindness of that fact, however, our high schools continue in large part to offer only training which is of greatest value to the few who can go on to college. This myopia which leads our school authorities to shape their high school curricula to meet the needs of the few instead of the many, is further confirmed by the pressure from our universities, which persist in regarding the high schools as primarily feeding institutions for the colleges instead of training schools for life itself, as they are in large part. Vocational training in the secondary schools should, therefore, be the chief concern instead of being a minor consideration, as it is now even in the most advanced city school systems of this country. In this matter of vocational education American school authorities have much to learn from German cities which have

attacked the problem of vocational education much more successfully than is the case in the United States.

One traditional weakness in our American school curriculum is now being partially remedied in a number of cities, that weakness being the long summer vacation. The almost universal practice of giving a three months' vacation during the summer is justifiable from no point of view. On the contrary, it is open to so many serious objections that one wonders how it could have been retained as a feature of American public schools during so many years. In the first place, so long a vacation is quite unnecessary. Neither teachers nor pupils are in need of so long a rest in order to be fit for a new year. As far as the pupils are concerned the results are most serious. Not only is all that time wasted, amounting every three years to the equivalent of an entire scholastic year, but it is even a more positive detriment in that the continuity of the educational program is so largely broken that the pupil has lost many of the threads onto which should be attached the teaching of the subjects in the new year. Furthermore, so long a period of absolute idleness engenders in many children a more or less pronounced disinclination to do school work, which interferes with their progress upon starting in again. Finally, from the point of view of economy in the use of public funds, the policy of long summer vacations is most extravagant. Every calendar year sees the expensive city school plant lie idle an entire fourth of the year in the summer, not counting Saturdays, Sundays, and other holidays during the school year. This is a point which will arise again in connection with the general problem of the wider use of the school plant, to be considered a little later.

The evils of the long summer vacation have led a

number of cities to introduce what are commonly called vacation or summer schools in which children may continue their studies during a part of the summer and so shorten the time required for completing their course of study. This is, however, only a partial remedy, for instruction is not ordinarily given in all subjects and attendance is not compulsory. If the long summer vacation presents all the evils mentioned above it should be discontinued and the entire school year lengthened. One month in the summer is all that is required for purposes of rest and recreation and would lack the disadvantages enumerated above. This lengthening of the present school year by two months would mean an increase of about twenty-two per cent in the teaching period each year. In other words, the course of study which now normally requires twelve years in the elementary and secondary schools could be completed in less than ten years under the new plan, a great saving for the child and for the city. The additional cost per pupil involved in paying teachers a proportionately larger salary for doing two months' more work each year would be practically offset by the shorter time required for each pupil to complete the elementary and secondary grades, and the overhead charges per hour of instruction for equipment would, as has been seen, be greatly reduced.

The second essential factor in an efficient school system is a competent teaching staff. Generally speaking, the assertion may be made that our public school teachers are paid far too little to secure really efficient service. The training which even an elementary teacher should receive in order to be properly fitted for the work is so extended that it represents a considerable investment of time and money. If that fact is not taken into consideration in the salaries paid, energetic and capable per-

sons will not be encouraged to enter upon the work. It is true that the character of teaching work offers some special attractions to those interested at all in that field which will serve to make up for some of the difference in the remuneration paid by that activity as compared with other possibilities open to the persons who would be adapted for that work. But where the difference is too marked, the result of paying small salaries to teachers is that most capable and energetic persons feel they cannot afford to enter that field of work, and hence in large measure it is only persons who are not able to earn even such small salaries at any other livelihood who are candidates for places in the public schools.

One result of the low salary scale has been the all but complete displacement of men by women, especially in the elementary schools. On the one hand, women have fewer opportunities for earning a living in other professional fields than have men, and, on the other hand, it seems women can live equally respectably on less money than can men. Furthermore, when men enter the teaching field it is usually with the idea of permanency, for a change of occupation is not easy. Many women, however, consciously enter into public school positions with the idea and hope of being there but temporarily, and the record of women teachers who marry each year shows that it is not altogether a vain hope. Whatever may be thought of the relative fitness of men and women for public school work, everyone is agreed that it is undesirable to have none but women in the work, and everyone is agreed also that women who go into the work with no idea of spending their lives at it, but merely as a convenient place to wait for a satisfactory offer in marriage to turn up, are not satisfactory material to make school faculties out of. The women here referred

to are those who look forward to marriage as a welcome release from teaching school. A difficult and much controverted question is raised by the case of efficient women who wish to continue teaching after getting married. A higher scale of salaries, with stricter requirements as to training, would tend to encourage men to take up the work and would prove more attractive to women as a permanent rather than a temporary undertaking. The wonder is that with our present salary scale we have been able to attract so many good teachers as are now found in the schools. But relative good fortune in the past in this regard is no justification for the continuation of a policy of niggardliness in the human element in our education, the element which of all the others is the most influential.

The third test of a good school system is the physical equipment. If, as is frequently the case, school buildings are ugly, ill lighted, inadequately heated, and improperly ventilated, with poor sanitary facilities and no playgrounds, the attendance of children at the schools may be a positive detriment instead of a benefit. The city must, therefore, be willing to spend the necessary money for a proper physical plant. This does not mean, however, that all money put into school buildings is well spent, a warning which many cities need to heed. Beyond the requirements mentioned above, money spent in extravagant buildings may be all wasted. Changing educational methods require changes in construction and the model school of today is likely to be obsolete and largely useless in twenty years. The practice of building monumental high schools calculated to stand as a thing of beauty for many generations is, therefore, a mistaken manifestation of civic pride. Handsome as well as serviceable all school buildings should be, but

marble columns and tile corridors are not proper fittings for buildings which it would otherwise be desirable to discard long before these features began to show any use.

In the location of school buildings it is obvious that considerations of convenience only should govern. That political motives have often played a part in their location is merely evidence of the fact that not even in the educational system of the city have improper politics been wholly eliminated.

One of the most encouraging developments of recent years in American cities has been the movement for the wider use of the school plant. It has taken a long time for the fact to be realized that it was poor economy to leave the large sums of money invested in school buildings idle so large a portion of the time. Making allowances for summer vacations and other holidays, besides Saturdays and Sundays, the school buildings of a community are normally in use but about half of the time during the year. Furthermore, the daily school period rarely covers one-third of the twenty-four hours, which means that the actual period of use of the school plant is but very small compared to the time during which it stands absolutely idle. The wider use of the school plant involves not only using the school buildings more extensively for educational purposes, as by shortening the vacation period, discussed above, and night schools, branch libraries, museums, and other educational agencies to be considered later, but also for social and political purposes. The use of the school building as a neighborhood house for gatherings of all kinds is coming to be recognized as a great possible means of social improvement. Purely social meetings serve a valuable purpose in developing neighborhood sentiment, while more formal programs present the possibility of public discussion

of live local political questions. The only additional expense involved in thus employing the school buildings for valuable social services is the cost of light and heat, janitor service, and some supervision, preferably by an expert full-time secretary for that purpose. The overhead charges for repair and depreciation of the buildings as well as interest and sinking fund on the money invested are not increased, but are relatively diminished by being distributed among a number of undertakings. So the use of school buildings as polling places, a common practice in French cities, for instance, though not a strictly educational purpose, nevertheless by saving the cost of building or renting special polling booths reduces the burden upon the taxpayer who pays for school buildings and polling booths alike. Of course the chief justification of these various undertakings that center in the schoolhouse is not primarily that they make use of otherwise idle property, but because they serve a valuable social end. But the fact that they can be carried on in the existing plant, and even make the schools themselves nearer and dearer to the mass of the people, is certainly a powerful argument in their favor.

So far the only educational facilities of the city that have been considered are the regular public schools intended for the children. If we had a perfect system of public schools and a really compulsory attendance by all children in the community, and if our cities were not continually receiving additions to their population from the outside, the problem of public education would be virtually the problem of the public school for children. As a matter of fact, however, neither of these hypothetical conditions exists in any city. No city has such a perfect public school system that every child in the community receives even a thorough elementary educa-

tion. Nor does the city exist which does not receive each year into its midst immigrants from other places who have not had such an elementary education. There will be found in every city, therefore, a varying number of young people over scholastic age, as well as adults of both sexes, who are without even an approach to such a thorough elementary education. In a democracy especially, the ignorant adult is a more immediate danger than the ignorant child, for the adult male, ordinarily at least, enjoys the right of a voice in the city government whether he has an elementary education or not; indeed, in most cases in the United States whether or not he can even read and write. To believe, therefore, as many citizens seem to believe, that the problem of public education is met in a community when the children are well provided for, but no attention is paid to the uneducated adults, is a sad shortsightedness indeed.

Obviously the problem of the uneducated adult is quite a different educational problem from that presented by the ordinary public school system. First of all, there is the fact that the adult in question is normally a wage earner whose days are occupied in earning a living. This means, of course, that the day school facilities are useless to him, even if the methods of instruction and the subjects taught would suit his case. To be of any help, therefore, such school facilities as are offered must be offered at night. Furthermore, the uneducated adult presents a different teaching problem. Instead of an alert child mind, his is a case of a mature, though largely untrained, intelligence which cannot be dealt with like that of a child. The teachers and the methods and instruments of instruction must therefore be different. Furthermore, many things which have to be told a child in school to prevent his learning them by sad experience

have already been learned by the adult in the hard school of life. The subjects taught must, therefore, also be different. A considerable emphasis must be placed on teaching those things which will be of the most immediate and direct benefit to the man and woman concerned in the business of earning a living in which they are engaged. The night school, although an integral part of the school system, is consequently a distinct administrative problem. Of course, there can be no talk of compulsory attendance, though in Germany, for instance, industrial employers are compelled to afford their young employees opportunity to attend the regular trade and finishing schools, even though the employees are beyond the compulsory school age. But the eagerness of workers to take advantage of opportunities for education which they feel will benefit them has been demonstrated in so many places where night schools have been provided that there need ordinarily be no fear of a lack of interest in the undertaking.

Schools of these various types are undoubtedly the most important educational agencies in the community. At the same time they are by no means the only ones that are of sufficient importance to be supported by the community in the interests of raising the educational standard therein. Even the children in attendance at the schools can profit by a number of these other agencies. But more valuable still is their influence on the young people and adults who are no longer in school or perhaps have never been to school. Chief among these educational opportunities may be mentioned the public library. American cities, in general, pride themselves on their public libraries and certainly in this activity the record of American cities compares very favorably with that of European cities. The Carnegie library movement

particularly has given a great impetus to the building of city libraries. The benefits derived from this interest in public library facilities has undoubtedly been great. At the same time the educational value of such libraries has frequently, if not generally, failed to attain anything approaching its maximum. The reasons for this failure are manifold and cannot all be considered here. The main trouble seems to be in the failure to keep in mind what class of people are in greatest need of the library facilities and how they can best be served. Let us consider, for instance, the matter of location. In a very large number of cities, the public library, or the main library if there be more than one, is located near the business center of the city. Now the homes of the working people, who constitute the class in the community for whom the library has most value, are rarely, if ever, near the business center of the city, though they may frequently be right in the industrial section. The consequence is that that class of people have frequently a considerable distance to go from their homes in order to enjoy the reading room facilities of the library. For the man or woman returning home from a hard day's work, the physical energy necessary to walk a considerable distance is commonly lacking and the expenditure of street-car fare is also out of the question. That man or woman is therefore deprived of the opportunities for reading and study which may mean so much to him or her. The obvious solution of this difficulty lies in the location of branch reading rooms which are convenient to the homes of that class of people. The most convenient places from that point of view are, or should be, the school buildings. They offer, therefore, at once a logical opportunity for the location of public reading rooms. This not only saves the expense of building or

renting special branch libraries, but uses a plant which, as has been seen, lies idle much too great a part of the time during which it might be used. The use of a portion of the school building for public library purposes, being a distinctly educational use, is highly proper from every point of view.

Another sad mistake that is frequently made in the administration of the public library is in the hours during which it is kept open. A ridiculous practice, which is unfortunately not uncommon, is to have the library open only during the hours of the working day, from eight or nine in the morning to five or six in the evening. No more effective blow could be struck against the usefulness of the public library as an educational agency than to adopt such hours. Much better would it be from the educational point of view to have the library closed during those hours and to have them open from five to ten at night. Then, at least, the persons who work all day and cannot afford library facilities at home and feel the need of further education and information in their work can enjoy the reading room facilities.

Not only are the location of the building and the hours of closing frequently unfavorable to the widest use of the library as an educational agency, but the character of the reading material is commonly far from meeting the educational needs of the community. Libraries, of course, have only limited funds for buying books. Librarians realize that their funds are dependent largely on evidence of interest on the part of the public in the literature to be found in the library. Popularity is, therefore, inevitably an important guide in the selection of books, because popular books swell the circulation and reading room figures, whether the books are of any educational value or not. Indeed they may even be posi-

tively detrimental to the class of readers who use them most. So it happens that the latest fiction, enthusiastically devoured by high school girls with romantic tendencies, finds a place on the shelf in multiple copies, while reference books with real educational value are omitted because the funds do not suffice. Little wonder, then, that the serious-minded worker who is led to believe that the community offers him opportunities for education in the public library so frequently finds that his case is not the one for which the librarian or the library board appear to show any interest.

Finally, even when location, hours, and reading material are all satisfactory, it is necessary to adopt some positive measures for encouraging the poorer element in the community to make the widest possible use of the library. Many of them would never learn casually that these opportunities exist, others are backward about entering by marble stairways in their workingmen's clothes and must be welcomed and made to feel at home, and a great many need guidance and advice as to how best to use the facilities accorded them. Until these considerations are given far greater weight than they commonly are in our city libraries today, it is idle to point with pride to these institutions as agencies of popular education.

Next to libraries, perhaps, one of the most potent of educational influences is the museum. Art museums, natural history museums, industrial museums can all be made to play a considerable part in popular education if properly equipped and administered. Much the same considerations come into play here, as in the case of libraries, if these institutions are to be of appreciable educational value. They must be free, open to the public at hours when the majority of the public are in a posi-

tion to visit them, and made as intelligible to the visitors as possible. For school children these museums constitute a valuable supplement to the classroom work; for adults they are the means of opening new prospects and even visions. Zoölogical and botanical gardens afford other means of popular education, combining outdoor recreation with opportunities for learning. Although not intrusted to the educational authorities of the city, all of these undertakings may properly be regarded as furthering the same general objects as the schools and libraries.

The invention and perfection of the moving picture machine has opened up new possibilities of popular education combined with recreation. Geography, science and invention, natural history, sanitation, are now all demonstrable in a fascinating way through the moving picture machine. Fire prevention, first aid to the injured, the care of infants, can be taught in a way that people are eager to watch through the cinematograph. Much has been said about the evil influence of the movies. The possibilities of the movies for good are just as great, and the city that neglects this means of entertaining, while instructing, its citizens is neglecting a social and moral opportunity as well as an educational one. Municipal movies may, therefore, be considered today as an important arm of the educational service of the city. The manifest appropriateness of exhibiting such movies in school auditoriums, when not in the open in school grounds or parks, need not be dwelt upon further, in view of what has already been said concerning the wider use of the school plant.

Finally, mention may be made of public entertainments of other kinds, that find their value in the educational as well as the social features involved. Music, especially,

may be made a means of popular education as well as of popular amusement. Community singing is coming to be recognized as valuable both as a means of educating people musically and of engendering democracy, sociability, and civic solidarity. Pageants are being used in many cities to enlist citizen coöperation in developing civic pride and traditions. Open air concerts in the summer and in school buildings or municipal auditoriums in the winter, by municipal bands and orchestras, have value as instruments of education as well as of entertainment.

So broad, then, are the educational activities of the modern city. Small wonder that their administration presents some difficulties, and, indeed, inefficiency in administration is quite as frequently the cause of failure in many of these undertakings as is the lack of adequate money for their support. Education is one of the hobbies of American cities, and if an undertaking can be shown to have real value as an instrument of popular education, it is safe to say that usually the necessary moneys will be voted. It is necessary, therefore, to examine briefly what some of the administrative problems connected with public education are and how they may best be handled.

To begin with, it may be stated that all of the educational activities of the city, as well as those which are primarily educational in character, should be administered by one authority. If public libraries, for instance, find the justification for their establishment and support in the fact that they are agencies of popular education, then their management should be intrusted to the educational authority of the city. The determination of the relative amount of money that should be spent on schools and public libraries, for instance, is a question

of general educational policy and, therefore, one to be determined by the authorities charged with the duty of providing for public education in the city rather than by conflicting interests and by the relative amount of political influence which two separate authorities may have with the appropriating power. Furthermore, as has been seen, there is the desirability of very close coöperation between school and library authorities in using the same buildings and other equipment. The maximum of effective coöperation is attainable only, however, when both undertakings are under the same direction. Much the same may be said of museums and other undertakings whose principal value is educational. In spite of these apparently obvious considerations, we find in most American cities the spectacle of separate library and museum boards besides the regular school authority, and, unfortunately, instead of a spirit of hearty coöperation, in some instances jealous rivalry. Librarians and library boards would, it is true, object to such a merger, but perhaps their objection is as good evidence as might be needed to show that the merger is desirable.

The school authorities are, therefore, generally not intrusted with the management of these other educational agencies. Furthermore, the school authorities themselves are, in the United States, commonly distinct from the rest of the city government. Now, it is true that the territorial jurisdiction of the school authority is the same as that of the city government, that the same people are served by the activities of the two bodies, and that the same property bears the common burden of taxation. It is, therefore, not unnaturally a matter of surprise that distinct governmental and administrative authorities are provided for this one branch of municipal administra-

tion. The explanation of this situation is partly historical and partly sentimental. Historically, the origin of separate school boards for educational matters was due to the same forces which created separate water boards, health boards, police and fire boards, or, when not boards, separate commissioners. Jacksonian democracy, which was based on the erroneous notion that popular participation in government increased directly in proportion to the number of public officers to be elected, was chiefly responsible for the separately elected administrative authorities in American cities. That is the historical reason for independently elected school boards. We have fortunately evolved out of that state of political fallacy with regard to the general principle involved and have abolished most of the independently elected administrative boards and officers in our most advanced types of American cities. Why has the independent school board so generally remained? The explanation of this fact is largely sentimental. As has been pointed out, our public schools have been perhaps the only phase of our municipal administration in this country of which every intelligent man did not need to be ashamed. While the term "city council" came to epitomize everything that was rotten and shameful in politics, our school boards, serving without pay as a general rule, rendered good and patriotic service. Of course, graft and corruption were not unknown in school administration, but they were distinctly not the general thing, and popular indignation could usually be relied upon to clean things up in that quarter. Furthermore, there is, perhaps, no other phase of municipal administration which is of such immediate and vital interest to so many members of the community and in which inefficiency and corruption are so likely to be popularly felt and de-

nounced as in the public schools. Inefficient police and fire departments injure at worst only a relatively small proportion of the community. Even public health administration, which is more universal in its immediate contact with the general public than are the public schools, is not understood by the general public and does not make nearly the same personal appeal. In view of these facts, the public has been adverse to intrusting the important matter of public schools to the regular organs of city government, which are still pretty generally viewed with distrust. So, while a concentration of almost all the other powers and functions of the city under the regular city authorities, especially in commission government, for instance, is rapidly coming to be the rule, there seems to be little tendency to continue this development in the case of the schools. Now, if this process of concentration is a good thing, and all students of municipal government are agreed that it is, then this sentimental aversion to intrusting the sacred public schools to the city governing authorities should not be allowed to prevail. The fear, of course, is that the school administration will be dragged down to the level of municipal politics. May it not just as well be anticipated that the public interest in schools may be the cause of raising the level of municipal politics if intrusted to the regular city authorities? Even were it true that better school administration can be attained by having a separate authority on which public attention can be centered, the same argument would lead to the establishment of a separate health authority, a separate police and fire authority, a separate park authority, the very situation we are congratulating ourselves upon just escaping. Some cities have, it is true, carried the development of recent years to its logical conclusion and have made the

school authority subordinate to the regular organs of city government. There seems to be no evidence that the prostitution of the public schools for political purposes, which was so generally predicted would follow from this development, has actually occurred.

It is believed, therefore, that the administration of public education in cities should bear a relation to the city government as a whole which is the same as that found in the case of the health department, the police and fire departments, or any of the other city's administrative departments, though this is not the common situation in the United States. In English cities, it may be said, the borough council is the educational authority, acting through an education committee, and in Prussian cities the regular city authorities also administer local educational matters through a school deputation or joint commission. In neither of these countries has the plan of independently elected authorities for different branches of local administration been in vogue, though special boards and commissions were found in English cities before the reform of municipal corporations.

The next question that arises in connection with the constitution of the school authority, whether independently elected or appointed by the organs of city government, is the constantly recurring question of municipal administration by the board form versus the single commissioner form. The board form, it may be said, is so general as to be clearly predominant. Where the school authority is an independent appropriating and spending authority and the city council or commission has nothing to say with regard to expenditures, much may be said in favor of the board organization. The amount of money which a community wishes to spend on public education and the apportionment of this money

among various educational agencies is a question of policy which the educational authority should determine in accordance with community sentiment. A board is less likely to be swayed by the individual opinions of members, which, because likely to be conflicting, tend to neutralize each other, than would a single individual be. Even here the administrative advantages of a single instead of multiple head are lost, but the political advantages may be said to outweigh the disadvantages. Where such an independent board exists it should be small, not over seven or nine members at the most, and chosen by non-partisan ballot for the city at large with long, overlapping terms. Under these conditions there is the greatest likelihood of a satisfactory educational authority being elected, if it is to be elected at all.

If, however, instead of an independently elected school authority, the administration of public education is made a coördinate branch of the city government with the other municipal activities, then the desirability of the board form of organization is greatly diminished. If the voting of moneys and the large questions of educational policy are matters left ultimately to the general representative body of the city, then the need for another deliberative body would seem no longer to exist. The expert information and knowledge for directing the educational work of the city is not supposed to be found in the board in either case, but in the city superintendent of public instruction, whose function will be considered in a moment. Therefore, the approval or disapproval of the proposals of this technical professional administrator can just as well be considered by the general policy determining the board of the city, that is, the council or the commission, as the case may be. Consequently, whether the appointment of the school authority

be in the hands of the mayor, of the council, of the commission, or of the city manager, the board form should be superseded by the single commissioner form, and that single commissioner should be the expert administrative head.

Practically every city has a chief administrative officer for the public instruction, commonly called a city superintendent. He is the technical expert who not only attends to the details of administration, but also outlines general policies for adoption by the board. It is his ability and training which determine not only the smooth working of the machinery of the public school system, but also its responsiveness to developments in educational ideas. He chooses the teachers and supervises their work, acting through assistants and the principals of the various schools. Ordinarily, also, he is charged with the business end of school management, the care and repair of buildings, the procuring of supplies and similar matters. The provision of new buildings is ordinarily attended to by the board, or in some cases by a special authority distinct from the regular school board.

In the handling of the personnel of the teaching staff, with regard to appointments, promotions and removals, the general principles of the civil service merit system seem quite applicable. In all the larger cities teachers are appointed upon examination, but, generally speaking, the teaching force of our cities has not been subjected to the complete civil service merit régime. Unless it can be shown that there is less danger of favoritism in appointments, promotions and removals for personal or political reasons in the educational service of the city than in the other branches of activity, there would seem to be the same necessity for protecting the service against unfit incumbents and for protecting competent employees

from unfair treatment or discrimination, as exists in the other branches of the city service.

Though the duty of providing public school facilities has been imposed upon cities both in the United States and in Europe, it is everywhere recognized that the city is performing what might be called a distinctly state function in so doing. In other words, it could never be regarded as a matter of relatively little importance to the state whether or not the city did its duty in providing free public education, as, for instance, it is a matter of relatively little interest to the state whether or not the streets are well paved in a given city. If the citizenship of a city is ignorant, there is just that much of the citizenship of the state that is ignorant and the state suffers proportionately. But though the state is also a sufferer, the city itself is more largely affected because so large a proportion of the children born in the city remain there throughout their lives and if not educated complicate the problem of government for the city itself in the greatest degree. For that reason it seems proper that the city should be charged with the duty of providing the educational facilities. On the other hand, the manifest interest of the state would make it desirable that the state retain some control over educational administration in the city, and that it contribute something toward the expense of public education in the cities.

In Europe, generally, the state does exercise an administrative jurisdiction over city schools and does contribute a part of the expense. In England the central Board of Education has a very considerable control over the action of the local school authorities. In Prussia the central control is even more minute, and in France the municipalities have almost no autonomy in school matters at all. In the United States, on the other hand,

neither state aid nor state control is the rule. Practically all states have a state department of education and a state superintendent, but their powers of direction and even of supervision, particularly over city schools, are in most cases insignificant. Financial aids to cities for educational purposes, either out of the income from permanent school funds or by appropriations out of the state revenues, are found in a number of states, it is true, but they are not the general rule and rarely amount to a very substantial share of the expenses of the city for schools. In the interests of uniformity in the matter of qualifications and salaries for teachers, of textbooks and of curricula, it would seem highly desirable to extend the control of the central departments over city schools. Here, as in other branches of municipal administration, such a development would have to overcome the opposition of those persons who are always ready to cry "home rule and freedom from state interference," without considering that the city is in large measure properly an agency for carrying out state functions within its territory.

CHAPTER V

PUBLIC MORALS

It was pointed out in the chapter on police administration, that the enforcement of regulations in the interest of safeguarding public morals, whether those regulations are passed by the state or by the city, is intrusted to the police. In a sense, therefore, this chapter contains a continuation of the subject of police administration. It was pointed out also, however, that the enforcement by the city police of standards of public morals enacted into criminal laws and ordinances led to police corruption and was generally undesirable. In European cities it was shown that the function is commonly intrusted to a special branch of the police service. In this chapter, however, we shall be concerned not with the question of the instruments or means of enforcing regulations in the interests of public morals, but rather with an examination of what is meant by public morals, and to what extent they can be properly regulated by law.

What, in the first place, is meant by public morals, and how do offenses against morality differ, if at all, from crimes or misdemeanors? It is obvious that acts may be illegal without being in any sense immoral. For instance, expectorating upon the sidewalk has certainly nothing inherently immoral in it, not even to the strictest

Puritan conscience. Out in the open country expectorating on the ground would be regarded by no one as morally wrong, but medical science teaches that the sputum contains disease germs which may be transmitted to other human beings when ejected upon the sidewalk. The protection of public health demands that expectoration be forbidden, and in order to insure the observance of that prohibition, a penalty is attached for its violation. This provision makes expectorating on the sidewalk illegal. It does not, of course, make it immoral. On the other hand, acts may be immoral without being illegal. To lie is immoral, but mere lying is not made legally punishable except under certain conditions. Now there is a tendency in America to try to make all immoral acts also illegal and punishable by law. The difficulty with this undertaking is twofold. In the first place, it is impossible to carry out such a program and to enforce such regulations with regard to many kinds of immoral acts. The shortcomings of the human administration of justice would result in more hardship than deserved punishment in many cases. In the second place, people are by no means agreed as to what is immoral. Public morality is largely a matter of bringing up and of inherited standards, not of an absolute and generally accepted conviction. In the last analysis, standards of morals are determined by the prevailing community opinion. We regard many practices as immoral in the United States which are not so regarded in Europe, for instance. Sunday amusements are decried by many Americans, while in Europe they are regarded as quite proper. Gambling is widely denounced as a sin in the United States, while most continental European countries maintain government lotteries. Monogamy is believed to be the truly moral marriage relation

in Christian countries, while Mohammedan countries believe in plural marriages. Almost as great differences of opinion exist within the boundaries of the United States, due largely to the fact that our population is made up in good part of people who were brought up under European standards of conduct.

If the standard of morals differs, then, for different communities, it seems to follow that the determination of whether a given act shall be regarded as immoral and detrimental to the public welfare, and so be forbidden, should be determined by the community itself, within the limits of controversial matters at any rate. Murder, stealing, and all the offenses against person and property are made punishable, not because they are immoral, but because they are anti-social. Whether a given act shall be considered not only immoral from the point of view of the individual, but also anti-social from the point of view of society as a whole, is the problem of so-called morals legislation. In a democracy, where the enforcement of the law is intrusted to local judges and juries, it is obvious that such legislation cannot be enforced in a community where the prevailing opinion regards the act made punishable as neither immoral nor anti-social. For that reason, also, morals legislation is properly a local matter.

Now, the controversial subjects that today come under the head of morals legislation are Sunday amusements, gambling, drinking and sometimes even smoking, and various manifestations of sexual immorality, culminating in prostitution. Though all of these subjects fall under the one general head and do present certain aspects in common, the governmental phases are sufficiently different to warrant their being briefly considered seriatim.

The regulation of Sunday amusements is, perhaps, one

of the best illustrations of the objections inherently involved in trying to impose standards of conduct upon communities by general law which are not accepted by the majority of people in the community in which they are to be enforced. Sunday observance is in reality a question of religious belief, not of morals at all. The traditional American attitude toward Sunday amusements is an inheritance from the puritanical Sabbath of England. As all worldly pleasures were considered wicked to a varying degree, it was natural that pleasures on Sunday should be regarded as especially of the devil. Our New England colonies, therefore, had very strict laws with regard to Sunday observance which were strictly enforced. As long as the prevailing community standards approved not only of this conception of Sunday, but also of imposing it on all inhabitants by law, there was no objection to their enforcement, in spite of the obvious discrepancy involved in the early declarations in favor of personal and religious liberty and the enactment of such regulations upon the statute books. The influence of New England ideas in this regard extended pretty generally over the entire country until comparatively recent times. But, partly due to changing conceptions of the relation of man to the Sabbath on the part of native Americans, partly due to the influx of many thousands of persons from other countries where Sunday was considered a day of recreation and pleasure rather than one on which all pleasure and enjoyment were sinful, the prevailing opinion in many communities with regard to Sunday observance came to be quite different from the original puritanical American conception. Obviously this is essentially a matter which each community should determine for itself, since it is a question of religious practices and standards. For the rural

element of the state, for instance, to lay down laws governing the action of city dwellers in such matters is clearly opposed to every conception of local autonomy that can be imagined. Experience bears out this theoretical contention. Attempts by state legislatures to impose upon cities, particularly upon cosmopolitan cities, standards of Sunday observance which do not appeal to the prevailing community opinion have too often proved abortive to leave any doubt on that score. If it is contrary to the fundamental ideas of personal and religious liberty to impose standards of Sunday observance upon communities which do not subscribe to them, there is also a limit beyond which even the majority in a given community should not go in a matter of this kind, which, as has been pointed out, is a matter of religious conviction. Everyone should be permitted to observe the Sabbath in his own way, provided his manner of observance does not interfere with a like privilege on the part of others. It is just as indefensible to forbid enjoyments on Sunday which do not interfere with the religious worship and the possibility of quiet for others who desire to spend Sunday in that way, as it would be to compel attendance at religious services. The proper limits of Sunday regulation would therefore seem to be such measures as are necessary to insure to those desiring it the opportunity for undisturbed worship and for rest and quiet during the day. Those are, as a matter of fact, the principles which determine the regulations concerning Sunday observance in European countries, which make no such loud boasts of individual and religious liberty as we do in the United States. The adoption of those principles in the United States would, it is believed, tend to make Sunday for many thousands of persons a day of mental and physical recreation as

well as a day of worship. The idea that prohibiting amusements on Sunday tends to increase attendance at divine worship would seem to rest on the supposition that people go to church only because they have nothing else to do, as a sort of break in the monotony of the day. It is extremely unlikely that the number of that kind of churchgoers is very large, or that the benefit they derive from attending divine worship in that spirit is sufficiently great to interfere with the liberty of the many who see nothing incompatible in attending worship and deriving pleasure from the rest of the day as well. This view of public policy with regard to the prohibition of amusements on Sunday is not, of course, intended to deny the importance of insuring one day of rest in every seven to the working population. Such a compulsory day of rest is a measure of economic and social necessity.

In considering the subject of gambling and the relation of the governmental authority to it, we begin to leave the field of religious opinion and enter that of public policy, though it must not be forgotten that the chief agitation against gambling comes from people who see something sinful in a personal way in indulging in that fairly universal instinct, the gaming instinct. Quite apart from any religious convictions, however, moralists generally are agreed that indulgence in the gambling instinct is degenerating and, in the long run, destructive, and that it is the business of the government to prohibit it in the interest of the individuals themselves, much as opium smoking is forbidden as a demoralizing practice certain to disqualify the individual from performing his proper function in society. So general is this agreement in the United States as to the undesirable consequences of gambling in all forms, that almost everywhere there are laws and ordinances against it. All kinds of gam-

bling devices are made illegal and subject to confiscation, betting at horse races is forbidden, lotteries are prohibited by state law and forbidden to use the mails by federal act, and the evil is attacked in all sorts of ways. Of course, not all gambling can be prevented, and though gambling bets were not enforceable at common law, showing the early conviction in England that gambling was *contra bonos mores*, private betting, card playing for money stakes, and games of chance are not and cannot be wholly prevented. It is only when the practice partakes of the nature of a public or semi-public undertaking that the law steps in. But the difficulty encountered in enforcing the law against gambling everywhere is evidence of the prevalence of the gaming instinct. It may be well to point out that most continental European countries take official notice of this tendency and operate government lotteries. The theory of this practice is that no governmental regulation of even an autocratic kind can suppress entirely the gaming instinct and that it is better, therefore, for the government to provide the least objectionable way for this desire to manifest itself. Government lotteries are fair, while privately conducted gambling enterprises are almost sure to be tainted with fraud and are frequently but ill-disguised robbery. Government lotteries, moreover, protect the individual by limiting the amount that can be placed at any one time, while private enterprises tend to encourage a man to risk *and lose* large amounts, perhaps his all. Finally, the profits from government lotteries go into the state treasury and are used for governmental purposes, while private gambling enterprises inure to the benefit of people who are frequently of the lowest element in the community. These considerations have led European countries to attack the evil results of

gambling by inoculation, so to speak, rather than by suppression. As to which of the policies comes nearer attaining the desired end, it is impossible to say. Certain it is that gambling, in practically unregulated condition and in the most vicious forms, flourishes in many of our cities in which both state laws and local ordinances explicitly forbid it and threaten it with severest punishment. Individual and secret gambling can never be prevented, but it is probable that public sentiment will enable the cities to prohibit effectively all public manifestations, especially those which are operated in such a way as to encourage and entice young persons and novices into gambling habits. But here again it seems that in communities where the general attitude toward gambling is not one of disapproval, it is neither proper nor wise to impose a moral standard upon them against their wishes by state law, but to leave it to local regulation. Without local sympathy no law of that kind will be enforceable, and the general attitude of lawlessness that comes from seeing laws habitually unenforced will certainly be more detrimental to the moral and governmental welfare of a community than would open, unforbidden gambling.

When the subject of the liquor traffic is considered, there is raised one of the most highly controversial and difficult of all the questions coming under the head of morals legislation. To begin with, it may be premised that the consumption of intoxicating liquors is injurious. This does not mean that merely the excessive or immoderate drinking of alcoholic beverages is injurious, but that drinking them in any amount, however little, is injurious. Drinking steadily and in great quantities is very injurious, drinking intermittently and in small amounts is a little injurious, but it is all injurious. About that fact there cannot be the slightest doubt, and only

those who are uninformed about the latest discoveries of medical science or who are willfully blind can hold any different opinion. It is true that individuals differ in this regard and that what hurts one a great deal injures another but a little, but injury to a greater or less extent there is in every case. To say that drinking is injurious is not, however, to say that the government should prohibit it. Overeating is injurious, lack of exercise is injurious, improper ventilation at night is injurious, yet no one contends that the government should determine what or how much individuals should eat, what exercise each individual should take, or how he should sleep at night. It is true that public health considerations insert in housing codes provisions with regard to the amount of air that must be provided in tenements and lodgings, but that is to protect the renter or lodger against danger to his health which is threatened by the self-interest of the landlord and which the renter himself is powerless to avoid. The code does not require the renter or lodger to keep the windows open. The reason why we do not legislate with regard to such matters as overeating is not because their detrimental consequences are not recognized. Every physician will bear witness to the fact that the dangerous consequences of overeating or improper eating may be much more serious than the results of a moderate consumption of alcoholic beverages. It is felt, however, that to interfere with the individual in such matters as his diet, his hours of sleep, his exercise, and the condition of the air in which he sleeps involves too great an infringement upon his personal liberty. So he is permitted to live as unhygienically as he pleases in those regards. It is worth noting, moreover, that the injurious consequences of overeating, for instance, are by no means suffered by the individual alone. If his

vitality and health are injured he becomes economically less fit and may be unable to care for those dependent on him. Furthermore, for the same reasons, his fitness to propagate the race may be impaired and his children will be less fit for life than if moderation had kept his body in perfect condition. Injury from overeating has therefore a social aspect beyond its immediate effect on the individual concerned. And yet we hear no proposal to supervise what and how a man eats. Why, then, such an agitation with regard to alcohol consumption, which, as has been stated, though injurious, may, if moderately practiced, be much less injurious than many other common practices of everyday life? On this point the advocates of liquor legislation divide.

There are those who believe that the detrimental social effect of alcohol consumption in any amount is so serious that all such consumption should be forbidden. These are the thoroughgoing prohibitionists who would prevent the manufacture and sale, and so the consumption, of alcoholic beverages throughout the length and breadth of the land. On the other hand, there are those who, while recognizing alcoholic consumption to be detrimental, feel that it is only the excessive consumption which is serious enough to justify governmental interference with personal liberty to the extent of interfering with the sale of intoxicating drinks. These are the temperance advocates, properly termed, who believe that the saloon and the public consumption of alcohol are a source of danger to the city and the state, but believe that the individual should not be prevented from drinking alcoholic beverages in his own home if he sees fit to do so. Then, of course, there are the open opponents of liquor legislation who believe that every man should follow the dictates of his own reason in the matter of

drinking and that it is not the function of the government to interfere in this matter any more than in a multitude of other practices which, though injurious, are generally indulged in without hindrance by the government.

The thoroughgoing prohibitionists, basing their stand on the ground that alcohol as a beverage in any form is an enemy of society, contend that the consequences of the drink habit are so serious that no compromise is possible. They assume that drinking, even to a slight extent, tends to lead to excessive drinking, or, in any event, tends to induce others to partake who may not be able to do so in moderation. They consequently would prevent all drinking by prohibiting the manufacture or importation of all intoxicating drinks whatever. They are logical in considering prohibition as a national question, for if the danger is as serious as they believe, it threatens the country as a whole and should be attacked as a national enemy. When a majority of the people of the United States come to believe that the evils of alcohol consumption are so serious as to demand governmental interference, and that the only effective measure against the evil is the cessation of all manufacture and importation of intoxicating liquors, the problem will have become greatly simplified.

At the present time, however, such action has not been taken by the National Government. The matter, therefore, rests with the states. Prohibition, so-called, is in most states, however, really not primarily a question of drinking or not drinking, but of the saloon. Now, the saloon presents a governmental problem in itself, separable from the general question of prohibition. Of course, if no intoxicating liquors can be sold in a state, that disposes of the saloon, and many enemies of the

saloon have worked for state-wide prohibition as the best means of driving out the saloon and the liquor interests from politics. In other words, the saloon has in this country frequently become a center of political corruption and misrule and has been attacked as such by many persons who were not willing to admit that the government had a right to forbid the individual from drinking in his own home. Just why the saloon developed into such an objectionable aspect of the liquor business in this country when it has not done so in many European countries is difficult to explain, but as a matter of common knowledge it cannot be denied.

Now, on the question of the saloon, as on the other phases of the liquor problem, people in this country are divided. There are those who wish to abolish the saloon, including both absolute prohibitionists and temperance advocates who believe the saloon leads to intemperance, as well as those who oppose the saloon on other grounds. There are those, on the other hand, who, not granting that the social consequences of alcohol consumption are serious enough to justify interference by the government, believe it is unjust to workingmen to close their opportunities for drinking while permitting the well-to-do to indulge because their means allow them to purchase intoxicating drinks in large quantities and keep them always in the house. Here is another respect in which native American traditions and European standards differ. Although there is plenty of drinking, and drinking to excess, among native Americans, more actual drunkenness, perhaps, than is found in European countries, yet it is none the less true that the total abstinence idea has made more progress in the United States than in Europe. This is largely because the consumption of alcohol has been made a quasi religious question in this

country. In many of our American churches it is not considered right for an individual to touch intoxicating drinks to any extent, and the churches are extremely active in securing abstinence pledges and in furthering liquor legislation. In Europe, on the other hand, it is in no sense considered incompatible with good standing in the church to indulge in the moderate use of intoxicating beverages. The continental European child is brought up to look upon the consumption of beers and wines in moderation as a perfectly harmless and proper practice, and himself begins the consumption with the knowledge and approval of his parents and friends. In the United States, drinking being so generally considered a sort of moral crime, has all the fascination of the forbidden, and young boys and girls indulge secretly and to excess. The European point of view has, however, had a considerable influence in this country, and in many communities, in fact in all cities with a considerable foreign population, there is a large element which sees no objection to the consumption of intoxicating drinks, either in the saloon, in the garden or café, or in the home. In fact in a good many cities the majority sentiment is distinctly that way. Now, where the local standards and sentiment favor the retention of the saloon, the same situation arises that has already been considered when the state attempts to abolish the sale of alcohol by general law. State-wide prohibition laws or constitutional provisions are enforced by local prosecuting officers, and tried by local judges and local juries. Where local sentiment is of the opinion that prohibition laws constitute an unjustifiable violation of personal liberty, it is obvious that there will be no hesitancy about nullifying such laws by mere non-enforcement. Whatever may be thought of the relative merits of prohibi-

tion and anti-prohibition, it must be obvious that it is much better to have intoxicating liquors sold in a community with the sanction of law than to have them sold in that community in clear violation of the law with the approval of local opinion. That is actually the situation in many an American city today. That is the main reason why the determination of the question of prohibition or non-prohibition should be left to the individual cities. In fact, until comparatively recent times, when the prohibition wave has carried state after state by state-wide prohibition, this matter was generally left to local option.

There is another reason besides governmental expediency for leaving this matter to local legislation. Whatever may be thought of the contention that alcohol in all forms and all quantities is an enemy of society, which, therefore, undermines the entire fabric of the state and is a matter of state concern, it must be recognized that this is distinctly a controversial political question, in fact one of the most consuming of American political issues today. Almost all other state issues are subordinated if not entirely displaced by this one issue, to the great detriment, as many enemies of alcohol themselves believe, of the other vital questions affecting state welfare. Now it is clear that the chief detriment, if detriment there be, resulting from the existence of saloons, is felt by the immediate locality in which the saloon or other liquor selling place is located. Even if all that extreme prohibitionists claim about the degenerating and corrupting effect of alcohol consumption in any amount were true, the locality would be the one to suffer most and the one to realize most forcefully the need of prohibition, so that it could with safety be left to the individual city. But, as we have seen, people are

by no means agreed that all alcohol consumption should be prevented by governmental action or that the saloon must be abolished in order to safeguard society. In recognition of that fundamental difference of opinion, a difference, by the way, which is a sincere and personal one, not by any means, as prohibitionists like to claim, one that is wholly manufactured and passed around by the liquor interests, it seems proper that such a limitation of individual liberty as is involved in prohibition should be imposed only by the locality which is, after all, the chief sufferer.

So far we have been discussing the question of saloon or no saloon, a question which it is believed is for the present, at any rate, eminently a question for local decision by the city and other units of local government. A part of the opposition to the saloon rests unquestionably on the supposition that the saloon is an institution that is incapable of proper regulation. That, however, is a supposition contrary to fact, and virtually all anti-prohibitionists, except those financially interested in the liquor traffic, are agreed that regulation of the saloon is not only possible but is highly desirable. It has already been pointed out that there are certain concomitants of the American saloon in its natural and unregulated state which are strongly and rightly objected to by every decent element in the community. One of these elements is the practice of selling liquor to persons who are clearly not in a position to judge for themselves as to the amount of alcohol they can consume with a minimum of danger, such as minors and habitual drunkards. Another is the tendency to connect sexual immorality with the saloon through the presence of immoral women and the opportunities for prostitution. A third is the disturbance of the peace that is likely to

result from having saloons or gardens open at all hours and on all days. In all of these regards saloons can be regulated and have so been regulated in many places. The liquor manufacturers themselves, realizing that these concomitants of the unregulated saloon have caused many people to line up against them who would not otherwise favor their abolition, have in many cases been desirous of such regulation and have advised and warned the saloons which they supplied to see that the regulations were observed.

It is, therefore, the duty of the city to regulate the saloons, where they exist, in the interest of public decency and quiet. On many of these regulations people are pretty well agreed, on others they differ considerably. The exclusion of minors and habitual drunkards, for instance, is a measure that has met with pretty general adoption. So also has the prohibition of immoral women and the abolition of the back rooms, upstairs quarters and other arrangements favoring sexual immorality. Early closing and the closing on Sundays have been pretty widely adopted, as has also the closing on election days in the interests of order and quiet. Another common regulation is the limitation of the number of saloons per thousand inhabitants, their prohibition near churches and schools, and other similar measures. A subject of dispute, however, in the matter of regulation is the question of interior fittings. The general feeling seems to be that the saloon should be made as unprepossessing and unattractive as possible, so as not to encourage its use. Accordingly, in many places chairs and tables are forbidden, and even the customary foot rail is tabooed. Music is prohibited and free lunches ruled out. On the other hand, some earnest advocates of regulation believe the opposite policy should be pursued.

The chief evil of the American saloon as compared with European cafés is, they contend, the rapid consumption of drinks at one sitting, or rather standing. To remedy that they believe chairs and tables should be provided and opportunities for obtaining food be offered, with such other attractions as music, etc. This, they believe, would tend to make the saloon a real workingman's club, where he would spend more time but consume fewer drinks than he does at present. They point to the example of Gothenburg, in Sweden, in minimizing the evils of the saloon by making it attractive. Both theories have been put into practice in this country with varying success. So far, however, these measures seem not to have changed the essentially tough and disagreeable character of the typical American bar.

The possibility of effective regulation of the saloon is insured by the method of license control. The sale of intoxicating liquors never was at common law a matter of common right. It was necessary to obtain a license to engage in that activity and that license was at all times subject to revocation. Our American cities have commonly been accorded the licensing power and can therefore not only impose such conditions as they will on granting of licenses, but can exercise an effective and continuing control. If the conclusions about the local nature of the prohibition question are correct, it is obvious that all cities should have the right of issuing or refusing licenses in accordance with their own regulations. It is true that this potential control has not always been exerted and that the liquor interests and the licensing power have been used to corrupt the police force of some cities. Indeed, one of the arguments urged against the saloon is the corruption in our city police forces, for which it has been held responsible.

To grant that there is great danger of corrupt influence and great temptation for the police force charged with supervising the saloons is not to agree that for that reason the saloons must be abolished. City councils and municipal officials, generally, have been bribed and corrupted by public utility corporations, yet that is no argument for abolishing public utilities, but rather for devising means of watching them more carefully. So in the case of saloons, watchfulness can prevent the corruption of the police force by this agency.

In the foregoing discussion the nature of the liquor question and its local character and connection with city government have been considered. It is clear that the whole matter would be absolutely and satisfactorily settled if every one in every community, or at least a substantial majority in every community, could be brought to realize that whether or not the evils of alcohol consumption, even in moderate measure, are great enough to justify governmental interference, they are great enough to induce every individual voluntarily to refrain from drinking intoxicating beverages. The measures adopted by European countries during the present world conflict prohibiting the manufacture, sale and consumption of some of the strongest of the intoxicating drinks, like vodka in Russia and absinthe in France, even though these measures resulted in a reduction of public revenues when public revenues were needed as never before, show the changing attitude in Europe toward such matters. As a practical matter, moreover, unless all signs fail, it will not be very long before prohibition in the United States will be not merely state-wide but nation-wide. To see that this development is coming is not, however, to agree that from a large point of view it is the best way of accomplishing the desired result. Much better would

it be if the non-governmental activities of the scientists and doctors, acting through the most powerful means of publicity, the newspapers, could lead the public to realize the fact that drinking never benefits, but frequently does serious harm. When such a campaign has resulted in a general conviction that alcoholic beverages should not be manufactured at all, then, and not until then, does it seem proper for the majority to impose its view of the question upon the minority. When such a conviction has become sufficiently widespread, then the question of local option disappears, and even state legislation should be superseded by national measures.

The final class of measures that cities commonly adopt in the interests of public morals are those intended to prevent indecency and sexual immorality in all its forms. Indeed, to many people the term immorality connotes sexual immorality in some form, and this kind of immorality is considered the most important of all the evils to be combated under this head. The commonest offenders against public decency are exhibitions and amusement places of various sorts, public dance halls, and printed works and pictures. The social evil presents special problems and difficulties and will be considered separately. With regard to the task of preserving the public morals or public decency, practically all people agree that it is the function of the government to prevent indecency from being exhibited in public and in such a way as to provide temptation for the young and innocent. But though there is general agreement as to the desirability of suppressing indecency, there is by no means general agreement as to what things are indecent and objectionable, from the point of view of morals, and what things are not. Here, again, we find great personal differences in the standards adopted. The only guide,

therefore, to the proper extent of governmental action is the general community opinion or view with regard to such matters. For instance, in the matter of picture exhibitions. There are many persons who believe that the exhibition of nudes in a public gallery is an offense to public morals and dangerous for the young. On the other hand, there are others who believe that, inasmuch as many of the recognized masterpieces of painting represent human figures in the nude, it would be wrong to deprive the public of the opportunity of cultivating the highest artistic taste. Now this difference in point of view becomes important, because in every city the authorities, usually the police authorities, are charged with the duty of safeguarding public decency and morals and they are frequently called upon to suppress certain kinds of exhibitions on the ground that they are indecent. What standard shall the chief of police adopt in taking action? Shall he be guided by the opinions of the hypersensitive element in the community, or by the representations of those at the other extreme, or shall he act upon his own convictions? Obviously there is no fairness or sense in choosing any one of these standards rather than the other. The same problem arises in connection with theatrical exhibitions, especially in the case of moving pictures. Of course, there are many coarse and lewd productions without the slightest pretence at artistic qualities which everyone would agree are indecent and should be suppressed in the interest of public morals. But there are also many other productions which are conceived in the highest artistic and moral sense and yet which offend many persons and are believed by them to be indecent. Classic dancing, for instance, which is frequently performed by dancers almost without clothing, is one of the commonest sources

of dispute and disagreement. Problem plays, that discuss matters of the most intimate nature, are decried by some as being dangerous, and praised by others as tending to increase rather than decrease morality. Who shall judge? It would seem to go without saying that the wisest decision with regard to plays and exhibitions which are decent and should be allowed, and those which are indecent and should not, cannot be rendered by the kind of person who is ordinarily, as chief of police, charged with the duty of making that decision. In fact, in a matter so personal as this, it is almost certain that the opinion of one man is not a safe test. Since the determination of such a question is not possible of decision by any positive and universally accepted standards, it seems that the only safe guide is the representative community opinion of the better element in the community, the element whose moral standards in other regards are not questioned. Here, then, is one place where a board is more valuable than a single individual, even in the work of administration. A board of censors is, therefore, needed in every city to pass upon all productions about which there could be the least difference of opinion. All public productions, therefore, whether plays, pictures, movies, or what not, should be required to submit to such an examination, before production, as will insure a scrutiny of the performance from the point of view of decency. The decision of this question being a local one, it is obvious that the approval of other bodies, such, for instance, as the National Board of Censors in the case of moving picture productions, does not obviate the need of local examination, as the local standards and views may be quite different from those of the national body. It is safe to say that the best policy with regard to productions of that nature is to

give the benefit of the doubt to the performance, for it constitutes a pretty serious infringement of individual liberty to undertake to dictate to grown men and women what they may and may not see. In the case of minors, however, the situation is quite different, for their lack of maturity, experience and judgment would tend to make them see only the objectionable features of many productions which to the adult mind would drive home a moral lesson. The board of censors might, therefore, very properly exclude children from many productions which it would not be justifiable to suppress altogether.

Indecent publications in the shape of printed matter or pictures are a source of danger, particularly to the young, and should be suppressed by the city in the interests of decency. Here, again, the line is extremely hard to draw between publications which discuss sex relations, for instance, in an indecent way and those which deal with the same questions in an unobjectionable way, but certainly much of the obscene literature which is for sale in public places could be suppressed without any great deal of difficulty.

One very difficult problem, from this point of view, in almost every city is the public dance hall. Dancing seems to make an appeal as a form of diversion stronger than any other form of amusement to all classes of people. The well-to-do have their homes, their ball-rooms and *thés dansants,* which are very select and not subjected to public criticism as a rule. The poor, however, in whom the dancing instinct is quite as strong, have no opportunity for satisfying that desire except in the public dance hall. There are still many people today who have religious and moral scruples against dancing and who, therefore, believe that it is wrong for the city to permit public dancing. Such persons are, however,

greatly in the minority and are continually decreasing in numbers. Nevertheless, there is a very general antipathy, on the part of the community which has other opportunities for indulging in dancing, against the public dance hall. The reason for this is obviously not any objection to dancing *per se,* but to the particular manifestations found in these halls. In other words, it is the ordinary concomitants of the public dance hall that are objectionable, not the dancing itself. Drunkenness and various forms of sexual immorality have frequently flourished in public dance halls, and many young men and women have begun a downward path at these places. For that reason there has been a considerable agitation for the abolition of the dance hall entirely. That, however, seems to be an unwise way to deal with the problem in view of the possibilities of the dance hall as a recreational opportunity for people who lack such opportunities elsewhere. If regulation of privately owned public dance halls in the interests of decency and morality is too difficult and too expensive, owing to the financial benefits accruing to the owner from having a loose establishment, then a better plan, than doing away with dancing facilities altogether, is for the city itself to provide such opportunities and see that the objectionable features do not creep in, a very simple matter where the city owns and manages the dance hall itself. This has been done in some American cities already and seems to have proved very satisfactory. It is certainly worth trying, not only as a means of meeting a moral danger, but also as a positive measure of social welfare, along the lines to be considered in the next chapter.

By far the most serious of the moral ills that afflict our cities is the social evil. By this is meant not the clandestine illicit relations between individual men and

women, associating for the time being with one another only, but the indiscriminate professional service by women for pay, either for themselves or more generally in the employ of others. Of the moral aspect of illicit sexual relations of the first kind it is not necessary to say anything here. Whatever might be desirable from the point of view of individual and social morality, it is generally conceded that the attempt of the government to interfere in such matters, so long as they were not publicly displayed, would result in more harm than good. But prostitution in the sense of commercialized vice has long been studied as an evil that might be eliminated by government action. It is an evil that is as old as cities themselves and is peculiarly a city problem. Officially it has long been recognized as an evil, and is forbidden in every civilized country by law. But actually there is no country in which the law is enforced and in which prostitution does not flourish in practically every city. In many cases, indeed, the law takes official notice of the existence of prostitution by requiring prostitutes to be registered and to submit to medical examination and supervision. In the United States the local police simply ignore the state laws making prostitution a criminal offense and content themselves with enforcing local statutes governing the manifestations of the evil.

Until comparatively recent times there has never been a serious attempt actually to prevent prostitution. In fact, it seemed to be pretty generally agreed that the social evil was not capable of eradication by governmental action and that the only hope of destroying it was to work upon the individuals, men and women, who were concerned. The reason for this attitude lay undoubtedly in the fact that a large portion of the population, of the male population at least, was not concerned

with the question and saw no harm in it either to the individuals or to society. That attitude was perhaps more common in Europe than in this country, but it was and is fairly prevalent everywhere. There are in this country today many cities in which a majority of the men in the community look upon the social evil with indifference, if not indeed with favor. Many a merchant, for instance, believes that the abolition of prostitutes, if that were possible, would injure the city by making it less attractive to visitors, and so would affect him financially to his detriment. Since the wiping out of prostitution in a community can come only as the result of a general and powerful conviction that it must go, it is obvious that no such eradication will occur in a community lacking in such a conviction, all the laws on the statute books to the contrary notwithstanding. It is obviously, therefore, distinctly a local administrative question, though the baneful results of prostitution are by no means localized in the community in which it exists.

Now, although few cities have seriously attempted to abolish prostitution and fewer still have succeeded in doing so, if indeed any have as yet attained that measure of success, certain measures have been generally adopted to mitigate some of its more serious aspects and public opinion has demanded their enforcement. In the first place, safeguards have been thrown around girls who might be led into houses of assignation by temptations, fraud or force. Pandering and seduction are everywhere criminally punishable, and recently the transporting of girls from one state to another has been made punishable by Federal Law. In spite of these precautions, it is still true that many girls are led into the business of prostitution, largely against their will, and, once

in, find it practically impossible to get out. On the other hand, efforts are generally made to diminish the publicity of the business. Streetwalking is commonly forbidden and all forms of public solicitation prohibited. In order to diminish still further the public aspects of prostitution some cities have followed the plan of having a segregated district and effectually preventing prostitution in any other part of the city. This policy of segregation, though presenting some advantages from the point of view of official supervision, presents several serious theoretical objections and has not proved acceptable in practice. It is now generally discredited, therefore, though it is still the plan followed in a number of cities. In some places an attempt has been made to attack the sanitary aspects of prostitution by instituting a medical inspection of prostitutes, by requiring them all to be registered and to submit to treatment and isolation if they contract venereal diseases. This is a common practice in European cities. The prevailing opinion seems to be here, too, however, that such inspection as is provided, even in the most active cities in this regard, is wholly inadequate to attain the desired ends and is even a source of greater trouble because of the false sense of security which it induces. Generally speaking, all these measures, which have been directed at the various manifestations of the evil instead of at the evil itself, have been ineffective. The conclusion would seem to be that the only way to improve the situation appreciably is to abolish the evil, root and branch.

Within quite recent years there has been a considerable awakening of interest in the question of abolishing the social evil entirely. In several cities and states there have been so-called vice commissions at work investigating the causes, principal and contributory, of pros-

titution and suggesting remedies. One significant result of these investigations and reports has been to open the eyes of many people to the serious nature of an evil which they had been accustomed to regard with indifference. Though there may be some difference of opinion as to the relative part played in causing prostitution by such factors as low wages, seduction, natural desire, etc., there can be no question that a community has it within its power to eradicate the evil entirely, if the great body of citizens demand it. One of the chief obstacles in the way of eradicating commercialized vice is found in the enormous profits that accrue to the beneficiaries. Chief among these may be mentioned the owners of buildings in which prostitution is carried on. They are frequently among the most influential members of the community and their self-interest prompts them to discourage any serious attempts to do away with a practice which nets them so large an income. This particular element of opposition has been successfully attacked by means of the so-called Red Light Injunction and Abatement Laws in several states. Under these statutes individual citizens may bring action against a building used for immoral purposes as a public nuisance. The action, if successful, destroys the value of the property until again turned to a legitimate use. This is one very effective way of aiding in the campaign of eradication. It is doubtful, however, if the evil will be entirely eliminated until the general attitude of most communities has been radically reformed. This can only be done through a campaign by the schools and churches, aided effectively by the public health department, which can adduce evidence against the social evil that will receive attention from many persons who are unable to appreciate the moral issues involved.

CHAPTER VI

SOCIAL WELFARE [1]

Social welfare as an object of governmental activity would, in the broadest sense of the term, comprise every legitimate governmental undertaking. All of the functions that have already been discussed, as well as those which will be considered later, find their justification only in the fact that they contribute to the welfare of society and the individual in it. In fact, all government finds its *raison d'être* in that fact alone. If we are to consider the social welfare activities of the city under a separate division, the term must, therefore, be used in a narrower sense. As to just what should be included under this more specific designation there is not entire agreement. For the purposes of this discussion, however, the social welfare activities of the city will be, in general, those measures which the city adopts for the protection and improvement of the helpless and unfortunate members of society, as well as those who are at a disadvantage because of general economic conditions and those who are physically, mentally or morally totally incapacitated and so become an out and out charge upon

[1] This subject is also treated at length in Ward: The Social Center, 1913; King: Lower Living Costs in Cities, 1915. D. Appleton and Company, Publishers, New York.—EDITOR.

the community. From this point of view the wage earning classes, particularly those belonging to the lowest class of unskilled and unorganized labor, are largely dependent upon governmental protection and positive action in order to secure that minimum of the necessities and comforts of life without which no human being can enjoy a decent existence. This whole field of municipal activity is one of the latest of municipal functions to develop. Curiously enough, too, it has been developed to a much greater degree in the cities of undemocratic Germany than in the American cities. Following the lead of Germany, English cities have made progress considerably in advance of most American cities also, but in the twentieth century a widespread awakening has occurred in the United States as well, which promises much for the development of social welfare work in American municipalities also. We shall consider here only some of the more important aspects of social welfare work in modern cities.

One of the most recent, and yet one of the most significant, of social welfare activities, is the attempt to improve the housing conditions in the city. Slums, that is, sections of the city in which people live in filthy, crowded, ugly holes, have generally been regarded as more or less inevitable accompaniments of city life. Certainly as far back as we have any definite information concerning city life, the slum has been an ever-present factor. In Rome the housing conditions of the poor were frightful and the greed of the tenement owners was one of the main causes of this condition. All through the Middle Ages and in the modern period down to the present, the condition of the poorer classes in the cities has been pitiable in the extreme. A hopeful sign of the latter part of the nineteenth century and of the

opening of the present period has been the beginning of an idea that perhaps slums are not absolutely inevitable and that by proper governmental action a slumless city might cease to be but a figment of the imagination.

It is not possible here to enter upon a discussion of the causes and possible cure of that universal social evil, poverty. That is a problem, the solution of which is still a long way off and on which leading thinkers are by no means agreed. It is important to point out, however, that in the last analysis the housing problem, as it is called today, rests fundamentally upon the economic causes of poverty, namely, insufficient wages for the laboring classes. A complete cure for the housing ills of modern cities cannot, therefore, be found until the problem of adequate returns to every productive member of society has been worked out. This fundamental fact must be stated with great emphasis at the outset, because many of the most ardent housing reform enthusiasts overlook or ignore that fact and delude themselves and others into thinking that this or that measure of improvement will provide a cure for the situation, whereas all it can do is to afford a palliative, a very valuable and desirable palliative it may be, but still not a fundamental cure. In fact, not infrequently housing reform defeats its own purpose by insisting on measures which, while improving conditions in the buildings constructed under the law, increase the cost of construction to the point that rents become too high for the class of people to be benefited, and their subsequent condition may be worse than the first. The discouraging point about the whole matter to the person interested in improving municipal conditions is that, whatever may be the solution of the problem of securing a living wage for every productive member of the community, it is not a solution that lies

within the province or power of the city. The city, therefore, though the chief sufferer from the deplorable conditions that exist, is largely powerless even to attack the fundamental causes of those conditions.

To say that the housing problem is largely a problem of decent wages and that the problem of wages is largely beyond the control of the city is not to absolve the city from the duty of taking such steps as can be taken to mitigate the evil and avoid some of its most serious consequences. There are various aspects to the housing problem, some of which have been touched upon in another connection and some of which will be considered somewhat later. First, there is the sanitary aspect. Lack of sufficient light and air and of proper sanitary facilities make the slums a serious menace to public health and the overcrowding found there makes the control of contagious diseases extremely difficult. Tuberculosis thrives most readily in the tenements where many persons sleep in a single room, often without any outside air at all and practically no daylight. Lack of proper washing and sanitary facilities makes cleanliness impossible. As a breeding center for the white plague, therefore, overcrowded, poorly lighted and ventilated living places constitute a menace to public health which must be remedied in the same way as other insanitary conditions in the city.

Conditions in the city's slums constitute a moral as well as a physical danger. No family life is possible under the conditions in which most tenements are found. All the members of a large family crowded into a single room, with the necessities of existence driving them to take in a night lodger besides, are absolutely destructive of decency in environment. The testimony of investigators shows that conditions of this kind are directly

responsible for leading many young girls into lives of shame. Furthermore, the very congestion of the tenements as well as the price of lodgings elsewhere drives the thieves and criminals of the community to take refuge in these places. The association of the children in the tenements with men and women of this type is responsible for the formation of the gangs which later graduate professional criminals for the community. In other words, every element of the surroundings in the city slums is a factor making for degeneracy instead of desirable development. As a social hazard, therefore, the slums must be an object of attack.

The method of procedure in dealing with the housing problem of the city is usually through the passage of a housing code. Such a code commonly provides building regulations for tenements which are meant to insure a minimum of light and air and of sanitary appliances. It commonly contains other provisions as well. So, for instance, safeguards against fire, which has always been a great life hazard in the crowded tenement districts of our cities, are inserted in a comprehensive housing code. The fire-resisting character of the building construction, the provision of fire escapes and of fire extinguishers, when inserted in a building code and carefully enforced by an adequate corps of inspectors, do much to lessen at least that risk to which tenement dwellers are subjected. Light and air are guaranteed by regulating the height of the building, the amount of the lot which can be built upon, a protection against back-yard tenements, which are the worst of all, the provisions regarding outside windows in rooms and the amount of window space that must be provided; while the size of the rooms and the access of outside air are regulated for the purpose of insuring sufficient ventilation. The number of fami-

lies that may be allowed to live in apartments of a given size is also the subject of regulation, though the overcrowding by a single family is a matter that is more difficult to reach. In general, these regulations are intended to restrain the landlord in his natural desire to get just as much return from his property as possible, without regard to the welfare of the inhabitants. The standards of cleanliness and mode of living of the tenement dwellers themselves are, of course, not regulated except indirectly. It happens, therefore, that insanitary and indecent conditions may exist even in model tenements, so-called, from the point of view of the building laws. The same is true with regard to the provision of sanitary facilities. The law may require the tenement owner to provide bath tubs, it cannot insure that they will be used. At the same time it must be remembered that the prevailing opinion that tenement dwellers are dirty from choice must rest either on an insignificant number of individual cases examined, or, more generally still, on prejudice pure and simple; the unfortunate individuals under consideration never having had a chance to show whether or not they would use such facilities if provided.

Such housing codes as these undoubtedly accomplish certain very desirable ends. They tend to put an end to the exploitation of the tenement dwellers by landlords whose financial interests are bound up with overcrowding and lack of sanitary conditions. Some marked improvements, it is true, can be made without greatly increasing the cost of construction and, therefore, without necessitating an increase in the rents. But the whole character of the modern housing code is such as to involve more expense in building tenements, for proportionately less ground can be used and expensive improve-

ments in the way of plumbing are required. To meet that additional amount invested the tenement owner will, of course, raise the rent correspondingly. As most tenement dwellers are, however, already spending the maximum amount available for rent, the result of such an increase will be to put the improved living quarters beyond their reach. What, then, is the solution of this difficulty? As has been stated before, the ultimate solution will involve the payment of sufficient wages to allow every worker to rent a dwelling that offers these minima of decency and sanitation. Lacking that development, however, the result of insisting on standards of tenement construction that put rents beyond the reach of the present tenement dwellers, will simply mean that they will be without shelter, if, under our supposition, all tenements are built under the provisions of the housing code. It is true that many tenement owners, if not the majority, are deriving unreasonable returns from their property and could rent for the same amount after making the required improvements in tenement conditions and still get a fair return from their money. It is also true that if the class in the community which is able to pay the higher rents resulting from compliance with the housing code is already sufficiently supplied with dwellings, the tendency will be to make the improved tenement owner rent at a lower figure, and one which it is possible for the proletariat to pay. But if model tenements do not prove a financially profitable investment, no more will be constructed, and with the increase in the city's working population the problem of the unhoused will again arise. Now the person or family without shelter is destitute and not only becomes a charge upon the community as a pauper, but, realizing that the best wages he can earn under the present in-

dustrial conditions are not sufficient to furnish him any kind of shelter, he is certain to become a derelict as well. Wherein lies the advantage of the model housing code, if it has converted men with homes, though poor and undesirable ones, into men with no homes at all? That, of course, is only a theoretical development, for no city has so completely mastered the housing situation as to have gotten rid of all undesirable slum districts. The practical effect, therefore, of housing legislation which results in raising the rents, is to compel the families driven out by the higher rent to go into even more crowded and undesirable districts, because the inevitable result of displacing a large number of families from tenements that have been converted into model tenements is to raise the price of remaining undesirable, but relatively cheap, tenements and so induce still further congestion.

The tenement owner cannot be compelled to rent his property at a loss or even at definite rates. If he will not rent at sufficiently low rates, the only other alternative is for the city itself to provide decent living quarters for the working population, at rents which under present economic conditions they are able to pay. Municipal housing is, in fact, not an unknown thing, for a number of cities in England and continental Europe have been experimenting with the matter. Their efforts have been very interesting and from some points of view encouraging. They have not, however, been altogether satisfactory or convincing as to the wisdom of that kind of municipal housing policy. Where the cities have condemned and destroyed slum districts and have built model tenements in their places, the result has frequently been the driving of people out of their homes who could not all be housed in the new quarters which did not

occupy the ground so economically. In other places this objection has been met by building single or two-family houses on the outskirts of the city on land bought by the city for that purpose. The trouble here has been, firstly, that the new houses could accommodate but a very small proportion of the tenement dwellers; and, secondly, that in most instances the city's houses were occupied by mechanics and skilled artisans, and not by the large class of unskilled labor whose economic condition did not enable them to pay even the low scale of rent demanded by the city.

Municipal housing experiments, therefore, have so far not proven a panacea by any means. At the same time there seems no escape from the conclusion that really noteworthy improvement in the living conditions of the people on the lowest scale of the economic ladder cannot, in the long run, be brought about by the activity of the cities through the passage and enforcement of model housing codes, unless the city is willing to face the consequences which, we have seen above, are very likely to follow the strict and all-inclusive enforcement of housing laws. In other words, if the city is not willing to see the very people pauperized whom it wished to help, it must be ready to assume the duty itself of furnishing decent living quarters to the poorest element in the community at reasonable rates; reasonable not from the point of view of fair financial returns, however, but from the point of view of the amount which that class in the community is able to pay. That, it will immediately be objected, is socialism. Socialism or not, it is the possibility which faces every city as an inevitable ultimate development when it enters upon the housing problem. That it is illogical for the city to let its well meant efforts for the benefit of the persons at the bot-

tom of the financial ladder result in degrading their position still more, by pauperizing them, is obvious. Equally true, though less obvious is it, merely as a question of finances, that it is cheaper for the city to furnish decent quarters to the working population at low rentals than to bear the cost of supporting these same working people made homeless by its alleged remedial legislation. The above considerations are not in any sense meant to minimize the terrible effect upon the community from slums and improper housing conditions generally, nor to minimize the importance of housing reform, for much has been accomplished and much still remains to be accomplished. It is believed wise, however, to issue a distinct note of warning that, in the absence of a fundamental change in industrial and labor conditions throughout the country, housing regulation is only a partial remedy and may conceivably carry us on to measures which should be clearly understood and provided for beforehand.

One or two other considerations are worth noting before leaving the subject of housing. Congestion, the worst evil in the housing situation, is caused, it is true, by conditions of labor, for congestion is said to vary directly with the working hours and indirectly with the wages. That is, the longer the hours of labor the greater the congestion around the industrial section of the city, because the workers are unable to spare the time from their resting hours which is needed to make long trips to and from the place of work. Similarly, the lower the wages the greater the congestion, because the rent in the tenements, though perhaps exorbitant from the point of view of what is furnished and of the returns to the tenement owner, are nevertheless the only ones in the city that can be afforded by the financial means

of the laborer. Nevertheless, something can be done to relieve the evil of congestion by providing cheap and rapid transportation facilities to the places of labor from the other portions of the city. Special cars for working people, at very reduced rates, have been found helpful in some European cities and might be used with profit in our industrial centers in this country. Such a device, coupled with the prevention of real estate speculation in the portions of the city where small and inexpensive workmen's dwellings might be erected, would at least offer some improvement in the congested conditions of the city. In this respect American cities are greatly handicapped as compared with many European cities, for our cities are, as a rule, powerless to acquire land for such purposes; whereas in German cities it has been found that the control exercisable by the city over land which the city itself owns and then leases or sells under restrictions can be made to count for the improvement of municipal conditions in a great variety of ways. Though this is a matter that will come up in the discussion of modern city planning, it is well to point out here that this power could be used to improve housing conditions also. In this connection it must be mentioned, finally, that the matter of housing has also an esthetic side which will be considered in the next chapter, under the head of City Planning. As it involves but incidentally the improvement of living conditions, it will not be dwelt upon further here.

It is not the housing question alone which results from the economic condition of the working classes. Almost all of the so-called social welfare work of the city is necessitated by the fact that the city must act in order to insure the minima of decent existence to that large portion of the community which is financially not

able to secure those minima itself. Reasonable hours of work and adequate wages are the fundamental prerequisites for improving the condition of the working classes to the point where they will be economically able to provide for themselves those things which must now be secured to them, if at all, by governmental action. But hours of work and amount of wages are matters that are almost wholly without the power of the city to influence. To a certain extent, however, the municipality can have an influence on working conditions in the city, and to that extent the obligation rests upon it even though the fundamental causes are beyond its control. The city as an employer of labor, for instance, can set an example to other employers in the matter of reasonable hours of work and proper compensation. If the hours of labor and the scale of wages generally prevalent among private employers are obviously unfair to the working classes, the city need not be guided by those conditions, but can and should establish conditions in its own employ which are fair and just. The eight-hour working day and a scale of wages equal to the best paid in private employments for similar work are certainly the minimum conditions, and in certain cases the city should clearly go beyond those minima. Directly, therefore, the city will be improving the condition of those who are in its employ, and indirectly it will tend to raise the standards in private employments. To urge the advisability of having the city, as an employer of labor, lead the way in establishing reasonable hours and fair wages does not mean that the city should not, on its side, insist upon a high standard of industry on the part of its unskilled employees and upon a high order of training and ability on the part of its skilled laborers and employees. Though cities have not, as a rule, set

high standards of fairness in treating their employees, they have been even more remiss in insisting upon high standards of accomplishment on the part of the persons on their payroll. In other words, though the standard of wages may have been unreasonably low for a good day's work, it was actually too high for the quality of returns demanded and secured by the city. The practice of rewarding political services with places on the city's payroll has, therefore, resulted in the city actually paying too much for the majority of its employees. If that species of graft were done away with entirely and the city secured a fair day's work from its employees it could actually save money and still pay a higher wage than under present conditions. Nor does this take into consideration the ultimate economy of securing a living wage and reasonable hours to every inhabitant of the community. There is also an indirect method by which cities can influence hours of labor and amount of wages in certain private employments. That is the power cities have over public utility corporations through the insertion of provisions covering these points in the franchises granted. This is a matter which will be touched upon in the chapter on public utility regulation.

Aside from the hours of labor and the wages which can be thus indirectly affected to a certain extent by the city, there are other working conditions which can be directly improved by municipal action. So, for instance, the sanitary conditions under which work is carried on in the city clearly comes within the public health authority of the municipality. The proper heating, lighting and ventilating of places of labor can be insisted upon by the city in the interests of public health, even if there is no state factory law covering those matters. The moral conditions surrounding places of labor are

frequently in need of improvement, especially in the interest of working girls. This can be accomplished by the city under its general police power. Recreation facilities can be used to improve greatly the conditions of the workers. Private employers are beginning to realize that the working efficiency of the individual can be increased by affording reasonable opportunities for rest and recreation and by improving the general conditions under which work is done. That realization is coming very slowly, however, and if the state does not insist upon recreational facilities for factory workers the city must provide such opportunities. The whole subject of recreation is one that will be considered a little later, but is mentioned here as showing one of the ways in which the city can aid in improving working conditions.

Among the most serious difficulties that threaten the wage earning classes is the matter of unemployment. In a very real sense this is, of course, a problem of income, for if a certain income is necessary each year to maintain a family in the minimum standard of decency which society should require, it is not the earnings of a day or a week that are important, but the earnings for the year. Like the matter of wages, furthermore, unemployment is caused, for the most part, by factors over which the city can have no control. Like insufficient wages also, unemployment causes conditions from which the city is the sufferer and which the city has to meet, namely, pauperism and dependence. To a certain extent, fortunately, the city can adopt measures that will tend to improve the conditions with regard to unemployment. There are two kinds of unemployment arising in a city, one of which may be termed normal unemployment, the other extraordinary unemployment. Normal

unemployment is due to two causes, one is the excess of workers over available opportunities for work, the other is the failure of those desiring work and those needing workers to get together. The former condition is one that, as has been seen, is not within the power of the city alone to prevent. Even should the city undertake to employ in public works of one kind or another all persons who were without employment—a measure which, though extreme, might be more economical than having to support as paupers the workers whom unemployment drives to seek public aid—it would be necessary, in order to protect a city against a deluge of unemployed from other communities, to authorize a city to exclude immigration into the city on the part of workers in occupations that were already overfilled. Such a power does not reside in cities, however, at the present, nor is it likely to be intrusted to them in the near future. But the unemployment which is due to the failure of employers and unemployed to get together can largely be eliminated. Where this matter is left to private agencies, as it commonly is in American cities, the interests of the persons operating the agencies are frequently absolutely opposed to the interests of the persons to be served and much fraud and hardship has resulted. It is eminently proper and desirable, therefore, that the city undertake this work, since its interests are entirely identified with those of the persons to be aided. Municipal employment agencies are fortunately becoming more and more common in American cities, though a mere beginning has been made.

Extraordinary unemployment is the unemployment due to waves of financial depression and crises which always result in a great many persons being thrown out of work who are normally engaged in earning wages. The causes

of general financial crises or periods of depression are obviously quite removed from the possibility of any municipal control, but here, again, the consequences may be partially avoided by municipal action. There is always a great deal of work to be done in any city in the way of public improvements, which forms part of a general program of improvement, but which, because it is not a matter of immediate pressing necessity, is postponed from one time to another to permit of more immediate needs being filled. Now if that work could be undertaken in times of financial depression the city would profit by having the desired improvements as well as providing an extra amount of work to meet the extra amount of unemployment. The difficulty that would be experienced in carrying out such a plan would be that the voting of moneys for public improvements and the sale of the bonds, when voted, would both be much more difficult to accomplish in times of financial depression than in normal times. The suggestion has, therefore, been made that a sinking fund be created out of the current income of the city, perhaps by special tax, which would be set aside and used only in emergency cases of this nature. Aside from the beneficial results following from creating useful work for the temporarily unemployed, this plan commends itself as a practical means of securing those public improvements which may be an integral part of a city plan, but which, because less pressing or less popular than other needs, might otherwise never come into their own.

There are other financial dangers that confront the man or woman who is living on the narrow margin of day wages. Unemployment or loss of wages may be caused by injury or sickness. If the state does not require employees' insurance and private corporations

cannot, or will not, provide it at reasonable rates, there is no reason why the city, which is, after all, the chief sufferer from all of these dangers to the working classes, should not take the necessary steps to afford those facilities. As has been stated again and again, if financial disaster overtakes the persons living on the lowest possible margin, they become paupers and hence charges of the community. Aside from all humanitarian considerations, therefore, and looked at purely from the point of view of financial outlays, these measures of social amelioration must be compared in cost with the expense of caring for the individuals concerned as paupers, or even worse, as criminals. Cities, in Europe at least, have found it desirable to provide other financial facilities for the element in the community which is financially weakest. So some cities operate a building and loan department which enables the working class, which is without capital or collateral, to build their own homes at reasonable rates of interest and on easy terms of payment. Many European cities also provide loan facilities on personal effects at reasonable rates. This policy is in recognition of the fact that many times in the lives of the poorer families it is necessary to secure a small sum of money to meet emergency expenses. Private pawnshops prey upon this necessity by requiring usurious and ruinous rates of interest, and therefore frequently destroy where they pretend to help. The city, therefore, should take over this activity, and could do so without incurring an added financial burden even when charging reasonable interest rates. This plan has the further incidental but very important added advantage of doing away with a serious encouragement to theft by destroying the principal market for stolen goods. Municipal savings banks have been found to

encourage the wage-earning class to increase their capital by saving and would undoubtedly prove very valuable in this country, where the disastrous experience of thousands of poor people with private savings banks has discouraged the practice of profitable saving. Interest rates could be as high as in private institutions, the security could be virtually absolute and the money used in retiring city obligations that pay a higher rate of interest and in other profitable ways. These are some of the ways in which modern cities are showing their realization of the fact that the welfare of the city is most completely bound up with the welfare of that largest class in every city, the wage-earning class. It is worth noting again, moreover, that this program of social amelioration has been carried farthest, not in the democratic countries where the poor are supposed to be the equal of the rich and opportunities are supposed to be equal for all, but in Germany, the classic country of class distinction, where the individual is popularly supposed to be of no significance and bureaucracy to be supreme.

One aspect of the significance of recreational facilities as a means of social betterment was touched upon in discussing the improvement of working conditions. Its scope, however, extends much farther than that and touches the life of the poorer classes at many points. Of greatest significance, perhaps, is the provision of recreational facilities for the children of the wage-earning classes, a need that is beginning to be met through the extension of the playground movement. The modern city realizes that numerous, conveniently located and properly equipped and supervised playgrounds are a most valuable asset from many points of view. First of all must be put, perhaps, the public health considerations. Even

under the most satisfactory housing system that could be devised, the children of the poor in the crowded districts will lack opportunities for healthful recreation. At present the city streets are the playgrounds of most of the children in the tenement districts, and most dangerous places of recreation they are. Aside from the continual danger to life and limb resulting from vehicular traffic, there is the further danger from breathing the dust and germ-laden air of the crowded streets. As a public health measure, therefore, it is most important to provide the children with playground facilities. From the moral point of view the matter is equally important. Cellars, alleys and crowded streets are not conducive to a healthy kind of play on the part of children. In fact, many a criminal is started on his mistaken path in the tough children's gangs that begin by imitating their elders in games of robbery and crime and end up by emulating them in the real activities. The open playground, with numerous and varied devices for amusement and exercise, affords opportunities for a kind of play that develops rather than destroys the moral fibre of the children. Under sympathetic direction by a trained and personally qualified supervisor, the playground may be made valuable from the point of view of character building without depriving it of that element of spontaneity which is the chief attraction of play to the children. School grounds can always be used advantageously for public playgrounds, but in the congested districts of the city, the playgrounds should be more numerous than schools commonly are, because more room is needed for this purpose.

Although the provision of the recreational facilities for children is perhaps the most important aspect of public recreation, there is an almost equally necessary field for

adult recreation. Generally speaking, the recreational needs of the adult portion of the working population are met by the provision of open spaces where fresh air may be enjoyed in comfort. But opportunities for games, such as baseball, football, cricket, and others that do not involve an expenditure of money beyond the possibilities of the poorer classes are also valuable. It is, however, a mistaken policy for cities to spend great sums of money in furnishing tennis courts and golf links, while the poorest classes are inadequately taken care of. Both of these games require an expenditure for equipment, particularly in the case of golf, which puts them quite out of the reach of the vast majority of the poorer classes who are in need of recreational facilities. Of course, it is desirable also for the city to make provision for recreational facilities for other elements of the community besides the wage-earning class with the lowest incomes, but the former are much less in need of public aid in securing their recreation than are the latter. The danger is that a city, in putting in an expensive system of public golf links, for instance, will either exhaust the money available for recreational purposes or will think it has done its duty in the expenditure of money in that way, when other more pressing needs have not been met.

Public baths are a convenience that have both a sanitary and recreational aspect. In that respect, the ancient Roman cities were far in advance of the average American city today, to which municipal baths are more or less an innovation. The public bath movement is growing in this country, and in many European cities has been well handled, but its importance cannot be overestimated. When it is remembered that a large portion of the poorer population in the tenement districts are without bathing facilities, the sanitary importance of the public bath

becomes manifest. It may be well to point out again, at this place, that the common conception of the aversion of the poorer classes to cleanliness rests upon insufficient evidence and prejudice, and that investigation bears out clearly the contention that where opportunities for cleanliness are afforded, the poorer classes are willing and anxious to take advantage of them. This is the experience of cities that have provided public bathing facilities. Public gymnasiums are another valuable recreational opportunity. It is obvious that in the case of these recreational facilities, as well as of all others, their chief value will be destroyed if they are not made free. Even a very small fee will often make all the difference between the possibility of their being used or not being used by a family that is living right on the lower margin.

Some other recreational agencies were mentioned in the consideration of the city's educational work, such as museums, botanical and zoölogical gardens, public lectures and concerts, etc., because they had an educational value as well as a recreational one. Public dance halls as a means of recreation and exercise were considered under the head of public morals, because they have so commonly been regarded as a source of moral danger. As has been seen, however, the public dance hall, if managed properly by the city, can be made to fill a very real want and a pretty universal desire on the part, at least, of the younger element in the city's poorer population. The same is true of skating rinks, both for roller skating and ice skating. The privately owned rinks afford opportunities of recreation to a portion of the population, but not to the portion that is most in need of them.

One further consideration must be mentioned before leaving the subject of public recreation, a subject which has been touched upon already in the chapter on public

morals, that is, the question of Sunday amusements. Whatever may be thought of Sunday activities by people that have time and money to enjoy amusements during the week, it seems impossible to justify the attitude which would deny to the people who have only Sunday for recreation, the opportunity to make the most of that day. It would seem to be too clear for discussion that the unfortunate element in the community which slaves from morning to night the whole week through and is too worn out at the end of the day's work to do anything but go to bed, will be better off physically, mentally and morally if they are afforded the opportunity of getting some real pleasure and enjoyment out of Sunday in their own way, so long as they do not interfere with the observance of the Sabbath by the other elements in the community in their own way. For a city, therefore, to recognize the value of public baths, dance halls, skating rinks or other means of amusement and recreation and then to keep them closed on the only day on which they can be made use of at all by that part of the population which needs them most, is comparable to erecting a hospital and then refusing patients because they are sick. The same considerations, of course, apply to amusements which are not managed by the city, but which are enjoyed by the working population of the city, like Sunday baseball and Sunday theaters. No one who has been brought up to believe that such amusements are wicked on the Sabbath need participate in them. On the other hand, neither need he impose his own convictions upon others less fortunate who, whatever their religious traditions may be, will be deprived of practically all opportunities for any amusement if the Sunday amusement is forbidden.

Leaving now the matter of recreational opportunities, there are a few other social welfare activities which are

coming to be recognized as proper undertakings for the city in aiding that class in the community which is economically unable to help itself properly, beyond furnishing the most indispensable elements of existence: that is, the portion of the community which is not actually pauperized, but which is so near the lower limit that any misfortune or unusual expense may at any time sink them below the level of self-support. It has already been shown that in many cases, particularly of contagious diseases, it becomes the duty of the city to provide medical help where that cannot be provided by the individuals, for the purpose of safeguarding others. But there are other cases, where the afflicted individual himself is the only one concerned and where the provision of medical assistance is a social welfare measure rather than a public health measure. It is well to point out, at this place, that the free clinics frequently provided by medical schools in our cities do not commonly furnish the kind of medical aid required. The poorer classes in our cities have come to have a dread of free clinics and free hospital beds, and not without reason. Too often the charity patients, as they are called, are looked upon as legitimate laboratory material upon which the doctors can try experiments which they would not dare to practice upon their paying patients. The use of such cases by medical students and nurses learning their work is not objectionable, provided proper supervision is assured, for the doctor and the nurse must get their practical experience in some way in order to become efficient in their profession. But the deliberate experimenting with the non-paying patients, without their knowledge and consent, is certainly not social welfare work, whatever value it may have from the point of view of advancing medical science. The city should provide medical attendance and

hospital facilities, when needed, at rates which the working classes can pay, without any charge at all when necessary, and such care should be of the best kind.

Another kind of professional aid which the poor man often needs but can seldom, if ever, pay for, is legal advice. The poor are the victims of tricks and cheating from many quarters, and their very inability to employ private counsel makes them a fair target for extortion in a variety of forms. A legal aid department in the city, where every citizen can receive efficient legal advice, is, therefore, a measure of social justice which but relatively few cities have so far established. Whether or not law and medicine are professions which should be entirely socialized, as some authorities claim, that is, taken over and administered by the government so that every man shall stand on an even footing with his fellowmen in the fundamental matters affecting his health and his property, certainly those who are unable to protect themselves in these directions should be looked after by the community.

So far, there have been considered the social welfare activities of cities which are meant to make life more decent and bearable for those who are living on the lowest margin and are able to provide themselves, even under the most favorable conditions, only with the bare necessities of life. There is still another class in the community which is even more in need of governmental aid, and that is the pauper class, the persons who are without even those minima of existence, who have no food to eat, or no clothes to wear, or no shelter to cover them, perhaps none of these things. The poor, it is said, we have with us always, and as a phenomenon of city life, they are as old as cities themselves. In Greek and Roman cities there was some governmental activity with

regard to these unfortunates, but it consisted solely in furnishing them with food when starving, and was haphazard and unscientific in the extreme. In the Middle Ages and in the early part of the modern era practically nothing was done for the poor by the government. The succor of the poor was early an important function of the Catholic Church, later exercised also by the Protestant sects, and in some countries today it is still left largely to the church. In the United States, poor relief, though theoretically a governmental function and almost everywhere imposed upon the county as the unit, is in our cities generally performed chiefly, if not wholly, by the churches and private charitable organizations, as well as by individual aid.

The objections to handling the situation by individual responses to individual appeals are manifold, so obvious, indeed, that the continuation of this method in most of our cities can hardly be understood. In the first place, street begging and house-to-house begging are incapable of adequate supervision and offer an invitation to fraud on the part of lazy individuals, who find it easier to earn a living by imposing upon the kindheartedness of the average human being than to turn to honest work. Not only does that demoralize the individual himself, if he is capable of earning a living at honest work, but it deprives really deserving cases of that support, and tends to make the defrauded persons, whose sympathies have been enlisted in undeserving cases, deaf to further appeals. The quality of sympathy is certainly a most desirable one and fortunately it is very general. The person who is approached, therefore, with a pitiable story and appeal for aid in his home or on the street, finds it difficult to refuse the appeal without a certain disagreeable feeling of a duty left undone. It is that fact which makes the eradication

of begging so difficult. It is easy enough to show that as compared with properly organized and directed relief work, individual giving to uninvestigated cases is not only ineffective but actually harmful, and yet such giving continues and is practiced even by persons who are able to see the injurious results. Until indiscriminate almsgiving of that kind is discontinued there is no possibility that any real progress will be made in the work of scientific poor relief. For that reason, and because of the almost irresistible appeal which individual cases make to the kindhearted, it is necessary that street begging and house-to-house begging be absolutely forbidden in the city. Of course such a measure assumes that some other means of caring for the poor is provided, for unless the charitable giver were convinced that the deserving cases of need would be properly cared for, he would continue to encourage begging by giving to beggars, in spite of all laws.

In realization of the inadequacy and the actually harmful consequences of individual indiscriminate dispensing of charity, the work of poor relief has generally been looked after in our cities by organizations, either by the various churches or by special charitable associations. Much of this work has been carried on successfully, but much of it has been little better than the unintelligent individual action which it was meant to replace. Indeed, even fraud has been practiced to a very large extent by organizations established for the purpose of soliciting funds in the name of the poor and then diverting the money to individual, selfish uses. The number of such fake charitable undertakings is very large, and they continue to flourish because of the very universality of the charitable impulse. Even when all organizations in a city are acting in perfect good faith and in the most approved man-

ner possible, the work is not properly done. When a number of independent bodies are engaged in that work, there is bound to be overlapping and consequent waste of energy. The value of close coöperation and coördination has, therefore, led in many cities to the formation of a single association known as the United Charities of the city which comprises all the other legitimate charitable undertakings of the community. Curiously enough even in the altruistic work of poor relief, petty quarrels, particularly interdenominational jealousies and the desire on the part of some of the churches to use the dispensing of charity as a means of proselytizing, have in some cases prevented the organization of the united charities and in other cases have interfered with the smooth working of the same. There is no question that the federated charity work marks a great improvement over the individual efforts of persons or associations. At the same time, it is believed that the best interests of this important work demand that it be assumed by the city as a regular municipal function.

It may be asked why the work of poor relief should be considered a governmental function and not rather a private concern, as it has been and still is in many cities. The answer is perfectly clear. In the last analysis, the reason why the government should look after poor relief is a clear necessity. Leaving aside all considerations of humanitarianism and the obligation of the government to serve all its citizens according to their needs, the function of poor relief can be regarded properly as an activity in the interests of public safety. To demonstrate this, it is only necessary to consider what would be the result if neither the government nor private activity should make adequate provision for the destitute and needy in the community. The answer is obvious. Self-

preservation is the highest law of nature, and necessity knows no human law. People who are starving or freezing to death, or, worse still, see their children in that condition, do not recognize the sanctity of the laws protecting property. Even our worst jails hold no horrors for them comparable to the horrors of such a situation. The uncared-for pauper, therefore, naturally and inevitably tends to become what society considers a criminal, that is, a person who does not admit the binding nature of society's restrictions. The result, therefore, of permitting the number of destitute persons to increase, without making provision for them, is to multiply the number of lawless persons and so to endanger the very existence of the state. Obviously, then, the government is chargeable with a duty, the neglect of which may entail such serious consequences for the safety of the state.

Though the safety and welfare of the state in general are affected by the failure to care for the paupers, the duty to look after the destitute is, in this country and in Europe, commonly imposed upon the smallest units of government. In England, the poor law union is a small governmental division made up of parishes for the purposes of poor relief; in Prussia, a similar unit exists, and in the United States it is commonly the county. But the American county, generally speaking, has not dealt satisfactorily with the problem of poor relief within cities that are contained in the county. Indeed, the county government tends to consider the city as being chargeable with poor relief within its limits, and restricts itself to poor relief in the rural portions of the county. It is not possible, at this place, to enter into a discussion of the way in which counties ordinarily perform their function of providing poor relief. It is sufficient to say, that even for the rural portions of the county the system is un-

scientific, expensive, and in every way unsatisfactory, while, as far as the cities are concerned, the county aid for the poor scarcely ever even scratches the surface of the pauper problem. It may be mentioned in passing, that until we develop a much more efficient machinery for seeing that the charge for public relief is imposed upon the locality properly chargeable with it, that is, the district in which the pauper has his domicile, one unfortunate result of systematizing and improving the poor relief work in a given community will be to attract to it the poor and needy from all the surrounding districts, where they know their wants will not be so well looked after. In Prussia, a community which constitutes a poor relief district can refuse to admit a newcomer for settlement, if it appears that he is not in a condition to support himself and family, much as our immigration officials refuse admission to immigrants who are likely to become a public charge. In that case, the individual is sent back to the district in which he has his domicile for purposes of poor relief, and that district must bear the costs of transportation. Under such circumstances, it is quite possible to insist that each district look properly after its poor, without penalizing it, for the efficiency displayed, by increasing its burden through the advent of the poor from less active districts. The entire machinery and system of public poor relief, therefore, needs overhauling and modernizing in the United States, but that does not diminish the advisability or the need of having cities take the matter of poor relief in hand for the best solution of the problems under present conditions.

The work of directing the charitable activities of the city should be intrusted to a well-trained and personally qualified administrative official. Indiscriminate giving

is just as detrimental to the best interests of all concerned, if it is practiced by the city, as if it is practiced by individuals. But scientific charity work requires training and experience. The problem of poor relief is not merely a problem of preventing starvation, homelessness or nakedness. If that were the only factor involved, the provision of a public poorhouse large enough to accommodate all who apply would solve the situation. The physically or mentally incapacitated must be looked after in that way in public institutions. Even there investigation and care would be needed to prevent fraud and imposition and to make certain that there are no relatives capable of supporting the individual. But under present conditions of society there are many able-bodied men and women who, through sickness, unemployment or other misfortune, are without the means of providing themselves with the necessities of life. These individuals may be termed the temporarily incapacitated, as distinguished from those who are absolutely and permanently helpless. It is obvious that these, also, must be prevented from starving and freezing; but the great danger in dealing with these persons is that the temporarily incapacitated will become permanently disinclined to work, having once enjoyed the possibilities of living without working. This pauperizing effect of merely ministering to the immediate wants of the unfortunate, without making every effort to make him self-supporting and no longer a public charge, is one of the curses of the system of private charities. To help a man over an emergency, therefore, without causing him to lose his self-respect, energy and initiative, and to put him in the way of recovering his economic independence is the great problem of poor relief, and one that the ordinary layman does not comprehend. It is for that reason that poor relief must

be a professional undertaking, not an amateur's or dilettant's work.

The objection is frequently raised that to make the work of poor relief an official function and to forbid it to the ordinary citizen is to substitute red tape and rule of thumb for kind impulses and generosity in an activity where above all else human sympathy is needed, and to stifle the generous sentiments experienced in voluntary giving. To this it may be answered that to make charity work a truly municipal function is not to take the human element out of the work nor to deprive the individual of the opportunity to obey generous and humanitarian impulses. The work of investigating the charity cases in a large city requires an army of workers, if it is to be successfully conducted. To employ paid employees for that work would impose a tremendous financial burden and would tend to interfere with the possibility of sympathetic human contact at this important stage of the proceedings. Here is a situation, *par excellence,* calling for voluntary citizen coöperation. Under the so-called Elberfelder system of poor relief, found in many German cities, every citizen is under obligation to engage, to a certain extent, in poor relief work in his district without pay, and in Berlin thousands of citizens are so employed. This insures individual examination of needy cases by persons who in no sense have the official's point of view, and whose individual services, though slight, total up to an astonishing figure. In the same way, the fact that poor relief is so fundamental an obligation of the community that every one should be expected to contribute a proportionate share in taxes for that purpose, does not prevent the possibility and desirability of enlisting individual aid of the more well-to-do by private subscription. The needs and possibilities of poor relief work in

cities are so great, and the problem of providing enough income by taxation for all the needs of the city is so difficult, that no city can ever hope to fulfill its obligations completely in this regard. There will always be need of all the money that can be obtained through individual effort, by private subscription, to supplement the public revenues. The charitable instincts of the well-to-do can, therefore, be just as fully cultivated and it is safe to say that many of them would be much more ready to contribute to the work, if efficiently and scientifically directed by the city, than if left to the haphazard devices of most private charitable organizations, or, worse still, subjected to the possibility of fraud in the solicitation or use of the funds asked for.

The last subject to be considered under the head of the social welfare activities of the city is the subject of corrections. In its larger aspect this is, of course, a question of general governmental import and one that in its more serious phases must be attacked by general state legislation. Almost all cities, however, more especially all the larger cities, have a considerable criminal jurisdiction of their own and possess the machinery of criminal justice. To the extent that this is true, therefore, the problem of the treatment of the offender against the law is a truly municipal problem and must be considered as such, even though the considerations that should govern such action are general in their nature and apply to the whole field of criminology.

Our ideas underlying the treatment of the offender against the laws still reflect the conceptions of the Middle Ages and even of early Jewish times in certain particulars. The old idea of criminal punishment was that of revenge. The individual who offended against society had to be revenged by that society, on the ancient prin-

ciple of an eye for an eye and a tooth for a tooth. In the more uncivilized stages of our development, indeed, the underlying conception was even more primitive, namely that of individual revenge. The aggrieved individual, or his immediate family, was supposed to look after the punishment of the offender, a doctrine that still survives in this country in the feud districts of certain states. Then gradually the state began to assume the obligation, first, of aiding the aggrieved individual, then, of regarding the criminal offense as primarily an offense against the state, and only secondarily against the individual. But still the underlying idea was revenge. A little later, the idea of punishment as a means of deterring others from committing crimes, was given more emphasis, though in that connection the most barbarous practices prevailed. Since punishment was to act as a deterrent, it was thought that the more severe the punishment the greater the deterrent effect. So we find in England, for instance, in the late Middle Ages and even later, capital punishment imposed for the slightest offenses. Not only were the punishments severe beyond all reason, but they were administered publicly, in the hope that the sight of public executions and burnings would still further act as a deterrent. The offending individuals were considered to have lost their status as human beings and were subjected to the greatest cruelties. Jails were purposely left filthy and terrible from the same considerations.

Today advanced thought has gotten far away from those conceptions, although our system of criminal administration still bears the earmarks of the earlier barbarous ideas. The scientific attitude toward the offender against the laws today is not that of revenge, but that of reform. The criminal is subjected to punishment, not in expiation of what he has done, but in the thought that

such punishment will prevent his offending again, and that it will serve as a warning to others. It has long since been realized, however, that it is not the severity of the punishment which acts as the deterring influence, nearly so much as the certainty of the punishment. If the apprehension and the conviction of wrongdoers is made certain by efficient police and criminal machinery, crimes will be much fewer than if a few only of the offenders are caught and are treated with the most inhuman cruelty. Furthermore, it is generally conceded today that to make public spectacles of criminal punishments has a positively degenerating, instead of regenerating, effect upon the witnesses and makes more criminals by far than it saves.

The underlying idea of modern criminology is, therefore, the reform of the offender, not primarily his punishment. Capital punishment, therefore, has no place in the modern conception of the relation of society to the criminal. The safety of society may demand that the unreformed murderer be confined, but it cannot demand his death, and society harks back to the days of barbarous revenge when it imposes the death penalty. The criminal being, therefore, in reality a ward of society, for his own improvement and reconstitution as a useful member of society, he must be treated in such a way that his reform and regeneration will in every way be aided. He must, therefore, have sanitary and decent surroundings, his self-respect must be developed by decent treatment, and he must be aided in meeting the problem of earning a living upon leaving the place of confinement. The appalling number of "comebacks" in our penal institutions is the best evidence of the inadequate way in which we care for the case of the criminal after he leaves the custody of the public authorities. Not only is he

without money, but he frequently knows no trade, and finds most reputable employments closed against him because of his past. Small wonder, then, that so many leave the penal institutions only to drop back at once into the only possible means of existence, namely, crime. Our penal institutions should, therefore, care for the physical welfare of the inmates so that they will, if possible, be better conditioned after they go out than when they came in. The moral and mental development of the individual should be cared for by instruction along various lines, and by the separation of confirmed criminals from those who have offended but lightly and for the first time. The economic welfare is no less important, and can be furthered by aiding the criminal to learn a gainful occupation at which he can work while serving his term and which will put him on a securer basis when he leaves. A tolerant and charitable attitude toward ex-convicts on the part of the public, is another important factor in reform. If these considerations are kept in mind, every place of confinement can be made a reformatory rather than a penal institution, and the diminution of crime aided instead of retarded, as it is by the antiquated notions governing most of our penal institutions.

Specifically applied to the city, then, it is clear that the city must provide a sanitary place of detention, must give its prisoners proper food and look to their reform. For this purpose, municipal farms for prisoners are very effective, and though the terms of imprisonment which cities are ordinarily empowered to impose are relatively short, those terms can be made profitable for the offenders instead of demoralizing, as they ordinarily are. From this point of view the employment of prisoners on public works, in sight of every one, is a most undesirable practice.

Not only must all offenders be treated with humanity and with a view to their reform, but special classes of offenders must be dealt with differently from others. This is especially true of juvenile offenders who constitute a good part of the individuals hauled up before municipal courts. In recent years the development of special juvenile courts for dealing with youthful offenders as needing warning and guidance, rather than as hardened criminals to be severely punished, has been one of the hopeful signs of an awakening public conscience in these matters. Experience already shows that youthful offenders stand a much better chance of having their first offense be also their last if they are put on probation under a friendly probation officer, to whom they must report at regular intervals, than if committed to jail like common criminals and there thrown into association with those who have behind them long years of criminal record. The many cases in which home surroundings are directly responsible for first offenses on the part of boys and girls can also be dealt with in helpful and sensible manner, if the officers in charge of such cases can devote proper attention to them and make a specialty of that phase of the administration of criminal justice. Of course many offenders are beyond reform and many are little deserving of sympathy, but most of them are derelicts, and their salvage and reconstitution are among the most important of the various social welfare undertakings with which a city is charged.

CHAPTER VII

CITY PLANNING[1]

City planning as an agency of general municipal improvement is distinctly a modern development. Indeed, it may be said not to have fully developed even yet, but rather to be just in the process of beginning its development. Conscious planning of certain of the physical features of cities for particular purposes was practiced, in individual cases, as far back as Greek and Roman times, to our certain knowledge. This practice, like so many other advanced developments, disappeared, however, in the dark ages following the decline of Roman civilization and practically did not reappear until modern times. Sir Christopher Wren proposed a city plan for reconstructing London, after the big fire in the seventeenth century, which was, however, not followed. Examples of comprehensive plans for the location of new cities were found in this country in the plans of William Penn for Philadelphia, in the seventeenth century, and the plans of L'Enfant for the city of Washington at the end of the eighteenth century. These were a few of the rare instances where it was possible to adopt a plan for a city

[1] This subject is also treated at length in Nolen: City Planning, 1916; Taylor: Satellite Cities, 1915; Bird: Town Planning for Small Communities, 1917. D. Appleton and Company, Publishers, New York.—EDITOR.

before the city itself existed, and so to direct the development along desired lines from the start. The ordinary situation that confronts the framers of a city plan is the making over of an already existing city, a very much more difficult problem. Among the most noteworthy undertakings of this kind was the reconstruction of a large part of the streets of Paris under the direction of Baron Haussmann in the time of Napoleon II. Since that time the city planning movement has spread throughout Europe, and particularly in the capitals has this work been carried on at great expense and with remarkable thoroughness. Many of the lesser cities of Europe, however, have also adopted and carried out very extensive schemes of city planning, involving both the reconstruction of the older parts of the city and the directing of the development of the newer additions. American cities have, for the most part, lagged behind in the realization of the importance of wise and comprehensive city planning, though the subject is being agitated in many communities.

In discussing the problems involved in modern city planning, it is well to keep in mind that in almost every instance the practical application of a city plan is not to a city that is about to be founded, as was the case in Philadelphia and Washington in this country, but to a city that has been in existence for some time and in which the business section, at least, is already compactly built up. This complicates the problem enormously from the point of view of finances, and would often make a plan wholly impracticable that would be admirable if the city could but start over again. It will be necessary to emphasize repeatedly, for this and other reasons to be stated later on, that an actual plan for any given city is a distinctly local problem which cannot be solved by the application of general formulae, but only as the result

of a careful first-hand investigation, on the ground, of all the local factors that bear upon the situation. That fact being kept continually in mind, it is possible, however, to consider some of the larger aspects of city planning which will have to be taken into account in any city planning undertaking, no matter how much the manner of their application may be affected by local peculiarities.

The first point to be emphasized in connection with the modern city plan is its comprehensiveness. A modern city plan is one which takes into account all of the ways in which it can aid in improving the city. Even medieval cities, haphazard as was apparently the arrangement of houses and of streets, were, of course, affected by some considerations, such as those of defense, for instance; and no city ever grew up without showing the effect of this or that practical consideration. But modern city planning is distinguished by the fact that it attempts to take into account all factors of importance, to give them their due attention and to develop the city accordingly. Even today much of the so-called city planning is defective in that it is one-sided or incomplete. The landscape architect, for instance, is too likely to be concerned with the purely esthetic side of city planning possibilities. The engineer, on the other hand, is prone to dwell almost exclusively on the traffic problems which city planning can help to solve. In truth, each of these considerations is important, but neither is sufficient by itself, nor are the two together even complete. Perhaps the most characteristic phase of modern city planning is the realization of the possibilities of social improvement by means of the city plan. Some phases of this side of city planning have been considered already, in connection with the location of playgrounds, for instance, and still others will be considered a little later on; but it is worth noting here

that the keynote, perhaps, of the best city planning today is the emphasis on the social possibilities of the city plan, giving due recognition all the while to the matter of convenience of intercourse as well as to purely esthetic considerations.

The earliest consideration to be emphasized in conscious city planning was the treatment of the city streets. Now, streets are in essence but open spaces left unbuilt upon for the purpose of enabling persons and goods to go from one part of the city to another. They are, in other words, arteries of traffic and their consideration should have that object primarily in view. A careful traffic survey must, therefore, be one of the preliminaries of a city plan. The two most important factors from that point of view are the arrangement and the width of streets. We, in America, have been the heirs of a system of arranging city streets which dates back to the time when Penn mapped out the streets of Philadelphia. His scheme had the great merit of simplicity, for it provided a rectangular arrangement in which all streets cut each other at right angles. This plan, known as the so-called checkerboard plan, was followed in almost all American cities after that, and is characteristic. The plan is not without merits, though its general adoption in American cities was due rather to unthinking imitation than to conscious choice. In the first place, the very simplicity of the plan permits of a system of street and house numbering that makes it very easy to find one's way about any part of the town. In the second place, this plan uses a minimum of space for a given width of streets and leaves, therefore, more room for the profitable use of the land. In the third place, by tending to make city blocks rectangular, and the lots in the blocks of the same regular shape, it simplifies the surveying and description

of property, and also the application of such systems of scientific valuation as the Somers system, to be considered in another chapter. On the other hand, this plan has the great defect of not adequately meeting traffic needs. Whenever traffic has to leave the street on which it starts, under this plan it must travel around the two sides of a triangle instead of along the hypothenuse. As only a small part of the city's traffic remains on the street on which it starts, there is a serious loss of time and energy as compared with the possibility of traversing the distance in a straight line. From the point of view of esthetic considerations, the pure checkerboard plan has the very serious drawback of unrelieved monotony. Landscape architects despair of streets unrelieved by curves or turns, and of the lack of spaces not used either for traffic or for building. The merits of the checkerboard plan, to say nothing of its universality in this country, make it desirable and even necessary as the foundation plan for most city streets. It must be pointed out, however, that even the advantages noted above in favor of this plan may be more than offset by the failure to take into account local topographical conditions, such as steep grades, for instance, which might be avoided by departing from the rigid plan. In fact, as has been stated before, no rigid plan will ever be satisfactory, for it does not allow for local factors, but with the checkerboard plan as a basis, the plan of inserting diagonal streets along the lines of greatest traffic, present and future, so far as that can be foreseen, largely eliminates the chief defect of the older type. Not only will the traffic distance be shortened, but the monotony of arrangement will be destroyed and the triangular spaces resulting from the intersection of streets at acute angles, which are not adapted for building purposes, can be advantageously

used for ornamentation with flower beds, fountains, and statuary. In some cases, where traffic conditions demand it, such diagonal streets can be made to radiate out from one or more centers with admirable architectural effect.

In addition to the straight thoroughfares, rectangular and diagonal, which, of course, are best adapted for traffic, circular streets are used with good effect. This feature of street arrangement was developed in the European cities where the old circular fortifications and walls offered admirable opportunities for converting these unbuilt and no longer useful spaces into ring boulevards. Their practicability is, of course, greatly lessened where the previous conditions mentioned did not exist, but their esthetic possibilities have led them to be introduced into some of the more pretentious city plans of American cities. The attempt to depart from the conventional street arrangements has sometimes resulted in unjustifiable extremes. Crooked and winding streets may perhaps be made more beautiful, but they are not economical or convenient, and in these days of swift-moving vehicles easily become positively dangerous. If the meanderings of a thoroughfare follow the natural windings of a stream or other topographical feature, it may be desirable to preserve the artistic natural features presented, or if a steep hill justifies a winding road as a means of overcoming the grade, a good reason for a crooked street may exist. Otherwise, it is little short of foolish to introduce street features which, while existing in European cities from earlier times, are there considered an unfortunate heirloom, and are being eradicated in the interests of traffic facilities.

One important consideration in the planning of the network of streets is the size of the city block, in other words, the distance between streets. On the

one hand, traffic considerations favor a short block from the point of view of accessibility, and, on the other hand, a long block from the point of view of minimizing traffic obstructions at cross streets. From the point of view of providing a maximum of light and air and of safety against fire, numerous streets with small blocks are advantageous. But from the point of view of an economical use of the land, few streets are better. In the downtown sections, where traffic considerations are the most important, streets should be close together in the direction of the main traffic movement and farther apart in the direction crossing this. An example of the worst kind of street arrangement, from this point of view, is seen in New York City, where the north and south avenues are far apart, though carrying a tremendous traffic, while the east and west intersections are very close together. In the business sections, where almost all of the lot can be used to advantage, the distance between streets or between the street and alley, that is, the depth of the lot, is not so important. But in the residence sections a deep lot may be undesirable, as involving an uneconomical use of the land in the case of residences or of encouraging tenements on the rear of lots, which are among the worst offenders against decency in housing. Other factors, therefore, than the mere need of streets at certain intervals as arteries of traffic enter into consideration.

Of almost equal importance with the matter of arrangement of the streets, that is, placing them at proper intervals and running in the proper directions, is the question of the width. One of the most widespread delusions with regard to city streets is, perhaps, the general idea that wide streets are the best and that, therefore, the wider the streets the better they are. Now, of course, wide

streets have some obvious advantages which make them appeal to the average city dweller. They afford opportunities for plenty of light and air. They relieve some of the feeling of crampedness that comes from the congestion of city life. They look imposing, and offer opportunities for beautification and parking. These advantages may, without doubt, be conceded. At the same time, there are disadvantages involved in needlessly wide streets which more than offset the advantages. Wide streets mean, firstly, the use of valuable land in an uneconomical way. A street that is too wide is not used completely, whereas that excess land could be employed for profitable uses. In the second place, wide streets mean large paving expense and big repair and upkeep items. Whether these are borne by the abutting property owners or are paid for out of the general revenues, it is an expenditure of money borne by the public. In the third place, streets that are extremely wide, compared with the height of buildings, are actually neither imposing nor beautiful, but quite the opposite. These defects of over-wide streets more than counterbalance the supposed advantages.

Now, what should be the test of the proper width of a street? Obviously, the test here, as in the other cases, should be that of the fitness of the street for the purpose it is meant to serve. If the street is primarily an artery of traffic, its width should be determined primarily by the needs of traffic. As the traffic needs of different streets are different, there is manifestly no single standard that should or could be applied to all. The width of each street will, therefore, be determined properly only after an investigation of the traffic conditions on that street. This involves first an examination of the traffic that actually passes along a street that it is proposed to alter in accordance with traffic conditions, and also a considera-

tion of the probable future traffic developments along that street. In other words, there must be something of prophecy in all city planning; in fact, that is involved in the idea of a plan, something prepared for the future. But this prophecy, though, of course, open to error, and therefore necessarily open to revision, must be based on careful investigation of all factors involved and upon the use of sound judgment, not merely a blind guess as to what will happen. A street may very properly be made too wide for the traffic that is passing along it at a given time, in order to accommodate the future increase that seems probable. A street may even consciously be made narrower than convenience of traffic at the time might justify, if it is known that some factor, such as the shifting of a railway terminal or other traffic center, will soon result in the discontinuance of traffic on that street.

Since streets are used by vehicles, and the size of vehicles of a given character is fairly uniform, the determination of the actual width of a given street should depend on the number of streams of vehicles of that size that would be likely to use that street. The width of the street would, therefore, be measured, not in round numbers of five or ten feet, as is commonly done, but in multiples of the distances that are needed for vehicles to pass each other on the streets. This determination should take into account all the usual instruments of traffic, business and pleasure vehicles, as well as street cars where these are used. If, then, the width of a street is fixed with regard to the regular or normal traffic conditions, it is obvious that excessively wide vehicles, that is, those occupying more than the normal clearance space allowed, will cause an undue congestion and interfere with the use of the street as planned. It is entirely justifiable, therefore,

having fixed the street at the proper width for all ordinary traffic purposes, to forbid the use of the street by such unduly large conveyances as, for instance, the large sight-seeing cars that are not uncommon in the larger cities. To illustrate again the point that intelligent city planning must take many other considerations into account besides mere beauty, it may be pointed out that the question of the necessary width of a street will be affected by the policy which the city intends to pursue with regard to the parking of automobiles or other vehicles along the curb. If the city is to permit the street to be continuously lined on either side with standing vehicles, the street will need to be wider than if the vehicles are permitted to drive up to the curb and remain there only long enough to discharge and take on their occupants. In other words, a street laid out with reference to one policy, and wide enough under those conditions, will become congested if the opposite policy is pursued. The adoption of the city plan at that point, therefore, involves a declaration of policy with regard to a question of traffic regulation.

Though the determination of the location of the street and the fixing of its width are the most significant features of street planning, because they are more or less permanent decisions, subject to change only at considerable expense, there are still other phases of the street problem which are in a real sense a part of the city plan with regard to streets. These include the paving and lighting of the streets. If the location and width of a street are to be determined primarily with regard to traffic considerations, so are the paving and the lighting. If the width and arrangement of the streets of a city are comparable to the floor plans of a house, the paving and lighting arrangements of those streets are the detailed

plans and interior finishing of the house, an integral part of the architect's plan.

The question is often asked by municipal officials: "What is the best kind of street paving?" To this it must be answered, as in the case of the similar question with regard to the best width of streets, that there is no best pavement for all streets. What is an excellent pavement for certain streets is wholly useless for certain other streets. Even climatic variations must be taken into account, to say nothing of cost, which varies for different localities. Furthermore, even for a particular street the question cannot be answered absolutely. There are a number of different factors to be taken into consideration, such as cost, including all such factors as initial cost, cost of upkeep, and the life of the pavement; cleanliness; safety for traffic; noiselessness, etc. The relative weight of these different factors will be differently judged by different persons, hence no absolute statement can be laid down even for a particular street. Some general considerations, however, enter into all discussions of the paving problem, and may therefore be briefly mentioned here.

There are five general kinds of street paving now in common use. These are wood blocks, brick, granite block, macadam and the various kinds of sheet pavement, including concrete pavement and a variety of asphalt pavements. Each of these classes includes a number of different kinds of pavement which present some considerable variations as compared with one another, but the following general characteristics are fairly descriptive. Wood blocks, now commonly treated with creosote, have the great advantage of noiselessness. They are also easily replaced when worn, making repair simple. On the other hand, they are not very durable, are likely to buckle when swelled with moisture, and do not present a very good

surface for keeping clean. Brick is more durable and, like all piece pavement, as contrasted with sheet pavement, is easily kept in repair. On the other hand, it is noisy and slippery. Granite blocks are the most durable, but are very noisy and do not usually present a good cleaning surface. Macadam is the least durable, not easily kept in repair, and not easily cleaned. It is, however, noiseless. The various kinds of sheet paving differ so largely among themselves that it is difficult to speak of them as a class. Generally speaking, they are not very durable and are difficult to keep in repair. They are also slippery when wet. On the other hand, they are easily kept clean and are relatively noiseless. As regards the item of cost, that is, cost of construction, there are, of course, the greatest variations due to the difference in cost of materials. Where brick is close at hand, brick pavements are relatively cheap. Where it has to be shipped a long distance the freight charges become an important item and may make it more expensive than wood or granite. The same is true of all the other pavements. Generally speaking, the sheet pavements are less expensive in construction than the piece pavements, but that is offset by the reversed order in expense of repair and in the life of the pavement. The true cost, therefore, that is, cost of construction plus cost of upkeep and replacement, is not so very different for the kinds of pavements considered. It is necessary to state that the cobblestone pavement, of which there is still a considerable amount in existence, has been generally discarded as unfit to meet modern traffic conditions.

One important consideration with regard to the choice of pavements is the changing character of street traffic from horse-drawn vehicles to motor vehicles. This change, which is rapidly resulting in the almost entire dis-

placement of the horse, affects almost every aspect of the paving problem. When the streets were largely used by horses, the question of noiselessness was very important, for the noise of horses' hoofs and of the iron-tired vehicles which they drew for commercial traffic was a serious item. With the advent of the motor-drawn vehicles and their rubber-tired wheels, the noise question sank into insignificance. The same thing is true of the matter of durability. Just prior to the introduction of automobiles, for instance, the ideal pavement for pleasure driving was the macadamized road. This pavement would stand up well under the wear of horses' hoofs and horse-drawn vehicles, but the terrific traction of the propelling wheels of the motor car demolished the macadam road in a very short time by pulling out the crushed stone and forming deep ruts, and a new kind of pavement was required. So, also, with regard to slipperiness and cleanliness. When heavy traffic was horse-drawn, the necessity of providing a foothold in the pavement for horses, as is offered in the case of granite blocks, introduced interstices which were difficult to keep clean of the dirt deposited by the horses. Motor trucks, on the contrary, need a smooth surface pavement and make no dirt. In the same way, there was an objection to wood and asphalt pavements in streets where horses were in the habit of standing, because the excreta tended to make these pavements rot. Paving problems are, therefore, different for streets that carry horse-drawn vehicles and those that carry motor vehicles. The matter is enormously complicated when both kinds of traffic must be taken into consideration. The conclusion that motor traffic, both for business and for pleasure, will eventually displace horse-drawn vehicles entirely seems so clear that a sensible paving policy for a city would devote its attention to the

needs of motor traffic and ignore the needs of horse-drawn traffic where these conflict with the former. Indeed, in view of the sanitary advantages, merely, of getting rid of horse dirt in the streets of the city, it would seem a wise policy to exclude horses entirely from the streets of the city. That has, in fact, been done with regard to the downtown section of the city of Berlin.

One simple fact of street engineering which has been more and more generally recognized is the importance of the base. Brick, wood or stone block laid on an imperfect base will not be satisfactory for any purpose. Neither will any kind of sheet paving. With the proper kind of a base and filler, brick pavement is very satisfactory. The same is true of wood and stone pavements. It seems, however, that for very heavy hauling, piece paving is better, while for the lighter traffic sheet paving proves superior, though, as has been said, the chief trouble with all the pavements is that their possibilities have so far not been fully realized because of general faulty construction.

Street paving, though recognized as a general municipal function, is commonly charged, in part or in whole, to the property abutting the street that is paved. Repair is more often assumed as a part of the general expenses of the city. The theory of charging the property owner with the cost of paving is that the value of his property is increased by at least the amount of the cost of paving, and that while the city as a whole benefits, it is not unfair to make him contribute to the amount that his property is increased in value. As a practical matter, street paving in American cities could not be carried on extensively in any other way, owing to the financial limitations under which they labor. Having, however, contributed to the expense of paving the street, it would seem that the prop-

erty owner should not be saddled with the cost of repair, as the street which occasions the necessity of repair is used much more by the general public than by him. Cities adopt different practices in that regard, however. Sometimes the city pays a considerable part of the cost of paving; sometimes, on the other hand, the property owner is charged even with the costs of repair. The whole question of betterment taxes, as these charges, which are based on the increased value resulting to private property from public undertakings are called, is one that is intimately bound up with the whole matter of city planning as a practical proposition, and will be taken up briefly after certain other aspects of the city plan have been considered.

Street lighting, as we have said, is as much a part of the street plan of the city as domestic lighting is a part of the architect's plan of a house. Whether the city itself should own and operate the lighting plant, or should buy its lighting from a private corporation, is an important question that will be considered later. It has nothing to do, however, with the question of the general lighting policy to be followed by the city. Street lighting is a necessity as a matter of public safety. It is also a means of city beautification. Both of these considerations must be kept in mind in determining the lighting policy of the city. From the point of view of public safety, lighting does two things. It facilitates traffic, pedestrian and vehicular, and diminishes the danger of personal injury. On the other hand, it is a safeguard for the prevention of crime and the apprehension of evildoers. In order to safeguard traffic, street lighting should be adequate to make the use of the streets reasonably safe for persons and vehicles. The fact that all vehicles are required to carry lights themselves, makes it possible to get along

with considerably less light on the streets than if street lighting were depended upon for making vehicles perfectly distinct to each other by such light. The same is true of the safety of pedestrians at street crossings, who can see the vehicles by their own lights. The sidewalks should be lighted sufficiently so that pedestrians can walk without danger of colliding with each other or with permanent or temporary obstructions on the sidewalks. That amount of light meets the traffic requirements. It follows, also, that, from the point of view of traffic safety, the greater the traffic the greater the amount of light that is necessary for safety. Consequently, there is much less need of light after street traffic has practically ceased than in the crowded hours of the evening. In fact, after one o'clock at night there is generally almost no need of street lighting for traffic purposes, and many cities extinguish their lights, or most of them, at that time. For the same reason many cities adopt the so-called moonlight schedule, that is, they do not light their street lights on moonlight nights. These attempts at economy, though laudable in purpose, are of doubtful value. In the first place, particularly with regard to the gradual extinguishment of lights as traffic needs diminish, they involve an expense of labor and supervision that partially diminishes the saving, and at best effect but little actual economy because the overhead charges which continue, whether the lights are used or not, are so great. Furthermore, they neglect the needs of such late night traffic as does exist, and, worst of all, they ignore the public safety aspects of lighting in the other connection, which will be taken up directly.

The question of the relative merits of gas and electricity as means of street lighting is a subject of controversy among lighting experts. The question of relative cost is

so largely affected by local conditions that no general answer can be made. Gas lighting is the older system, and was rapidly being displaced by electric lighting when improvements in the former again brought it into favor. Of more importance than the particular medium of lighting used is the proper placing of the lights for effectiveness. A good illustration of the kind of innovations which may prove popular in spite of obvious impracticability is the system of tower lights, which came into vogue some years ago and were pointed to with pride by the cities possessing them. The foolishness of lighting the atmosphere a hundred feet or more above the ground, though apparently obvious, was some time in being recognized. It is, of course, the street surface which is sought to be illuminated, and lights that are higher than is necessary for the purpose of avoiding serious glare, are spending their energy in largest part in a useless direction. Many of the problems of lighting are technical engineering problems, a proper solution of which can be arrived at only by lighting engineers. Others are, however, merely matters of common sense, which when also intrusted to the sole decision of lighting experts are no more likely to be wisely decided than if left to the general public. For instance, the practice of creating a Great White Way by means of excessive lighting is a recent fad from which many a city, particularly among the smaller ones, is suffering today. Instead of placing useless lights along the main business streets, where store window lighting makes it possible to get along with less than would ordinarily be needed for traffic purposes, this expenditure could more profitably be made in the residence sections of the city, which in the White Way cities are commonly neglected.

It was stated above, that traffic safety is not the only

consideration of importance in street lighting as a safety measure. The reason why robberies and burglaries are so much more common at night than in the daytime is obviously because darkness makes it easier to commit these acts without danger of being caught. Part of the business of street lighting, therefore, is to diminish the advantage which darkness brings to the criminal classes. In fact, this is the really fundamental reason for street lighting, and the one which, as has been pointed out before, led to its introduction in cities. A moment's consideration will serve to show that the principles governing the use of lighting for this purpose are not the same as those with regard to the traffic safety features. While traffic needs require a greater amount of light in the downtown sections where traffic is greatest, and less in the residence sections where traffic is lighter, considerations of police protection demand enough light in all portions of the city to make it reasonably safe for persons on the streets and for the houses. No force of police, no matter how large, would constitute an adequate protection if there were no light, or insufficient light, on the streets to enable them to apprehend evildoers with a reasonable degree of certainty. In the same way, while the traffic needs for street lighting decrease with the diminution of traffic late at night and toward morning, the need of lighting as a means of protection against violence increases instead of diminishes with the decrease in the number of persons and vehicles on the streets. To look, therefore, merely at the traffic value of street lighting is to ignore one of the most important features, without which the police protection of the city is made enormously more difficult.

Finally, street lighting can be made a means of city beautification. It must be remembered, of course, that the

chief function of street lighting is utilitarian not esthetic, and that if a particular lighting device that is considered handsome proves to be wasteful or impractical, it should make room for one which is useful first and handsome second. This is the more necessary because relative usefulness is a matter that can be determined with considerable accuracy by scientific tests, while relative beauty is always a matter of considerable diversity of opinion. Fortunately, however, it is entirely possible to combine beauty with usefulness in this as in other matters, whether or not true beauty is always inseparable from usefulness as some maintain.

Intimately connected with the treatment of the streets in the city plan is the whole matter of transportation facilities, especially the location of street railways. Street railways, because of their tracks and poles and continuous use of the streets may, although needed as transportation facilities, constitute serious causes of traffic congestion. Their location should be determined in the light of general traffic conditions, therefore, as well as of the convenience of the passengers to be transported. They are, of course, most profitable in the thoroughfares where there is the greatest activity, and, therefore, already considerable congestion. It may be desirable, therefore, to locate the street railways on adjoining streets, even though it may prove financially less profitable. In the same way, the extensions of the street railways should not be determined, as they commonly are, by the influence of real estate speculators who wish to enhance the value of their property and make it more salable. On the contrary, they should be determined by the large question of policy as to which is the best direction in which to have the city expand. The possible significance of rapid and convenient transportation facilities

from suburban workingmen's colonies to the industrial center of the city, from a social point of view, have already been pointed out in connection with the consideration of the housing problem.

Not only the choice of streets for the railways, but also their location in the streets, should be determined by considerations of convenience to the public, not by the interests of the street railway alone. Considerations of beauty can also be given prominence in this connection, because the appearance of the street can be made or marred by a street railway. Underground service instead of poles increases both safety and beauty. Parking of spaces between the tracks, tastiness in the colors of the cars, and artistic treatment of waiting rooms and platforms are some of the ways in which the street railways can be made to enhance the beauty of the street instead of destroying it.

The location of street car lines is generally determined, in part, at least, by the location of the railway stations, steamboat docks, and other gates of entry into the city. A satisfactory transportation plan for the city cannot, therefore, ignore the matter of the location of these city portals. Reduced to its simplest forms, the ideal arrangement would be to have all the means of transportation into the city localized at one spot. This would not only effect an enormous saving in the cost of transferring passengers and goods from one station to another, and so diminish the useless traffic in the streets, but it would simplify the whole transportation problem in handling the arrivals into the city, as the car lines could be made to radiate from this union station into all parts of the city. The location of the terminals is therefore a matter in which the city is vitally interested, and in which it should have the determining voice. In the artistic treat-

ment of the station buildings and of the surrounding grounds, a splendid opportunity is presented to make the city beautiful at the point where most persons receive their first impressions. It is, unfortunately, characteristic of American cities, except in the case of some of the largest and newest ones, to have the railroad station not only inconveniently located and poorly served with transportation facilities into the city, but also to have it a hideous looking structure located in about the dirtiest and most unattractive part of the city. One of the first things that strikes an American, therefore, traveling in certain countries of Europe, is the neat and handsome appearance of the railway stations and their surroundings. An encouraging example of the same principle applied in this country is the new Union Station in the city of Washington, which, it must be admitted, is far ahead of most other American cities in many phases of city planning.

A fundamental part of every city plan today is the location of parks and boulevards. One of the chief factors in the location of parks has naturally been the utilization of natural advantages, such as watercourses, hills, etc. Here again no general scheme of placing parks would be serviceable, because these local factors should be taken into account. At the same time it must not be forgotten that, however valuable parks may be from the point of view of the city beautiful, they are even more important from a social and sanitary point of view. The great social value of playgrounds for children, and the importance of their proper location for that purpose, have been pointed out in the chapter on social welfare activities. The same factors enter into the location of parks. It is not uncommon for cities to lay out elaborate and extensive parks on their outskirts and to point to

the thousands of acres of park with pride. A park that is so far from the congested tenements of the city that it is necessary to use the street cars to get there may be a thing of beauty, but is not a joy forever to those who most need the joy that parks offer. Infinitely better, though perhaps architecturally less imposing, are ten parks, of five hundred acres each, located in the congested sections of the city, than is one grand park of five thousand acres. The reason for this lies simply in the fact that to the poorest of the working classes every cent is so indispensable that the ten cents required for each person to go to and from such a distant park is simply an impossible expenditure, to say nothing of the fact that the use of the parks for an hour's recreation at night becomes impossible. The sanitary and recreational value of park facilities to people who are shut up all day in dark, ill-ventilated workshops or factories cannot be overestimated.

Somewhat the same objections may be urged against the manner in which parks are frequently laid out. As the chief aim of the park is to afford opportunities for moving about and for relaxation, it is a sad mistake to build the park up altogether out of flower-beds or lawns that must be guarded with a "keep off" sign. Boulevards in the same way should not be constructed simply as pleasant driveways for the fortunate element in the community that is able to use them for pleasure riding, but should also include features that will make each boulevard a narrow but widely accessible and continuous park.

A part of every city plan is the location of public buildings. It is perfectly obvious that public buildings, that is, those erected for the service of the public, should be located in acordance with the demands of greatest convenience in such service. Unfortunately, this obvious

point of view commonly yields to considerations of practical politics. The city usually pays well for the ground it needs for buildings, and citizens with real estate to sell can afford to exert considerable pressure in favor of their particular wares. Furthermore, land around public improvements increases in value and contributes still further pressure for the location of the improvements in a particular place. As a result, the location of the buildings is determined by the factors that exert the greatest selfish influence instead of by considerations of public convenience. This is true not only of the buildings which the city puts up. There is in every city, except the smallest, a federal building, sometimes more than one. The location of this, in the same way, is determined by political considerations largely. The wishes of the city in regard to the location of that building are not only of no legally compulsory significance, but they are also very likely to be entirely ignored, if the interest of the influential politician is opposed to those wishes. The same situation exists wherever there are county buildings in the city, which is the case in the many hundreds of county seats.

A really comprehensive treatment of the public building feature of the city plan is, therefore, not within the legal power of the city. The best that can be done is to encourage coöperation on the part of the county, state and federal officials in the way of determining jointly on the best location of such buildings in conformity with the best interests of both parties. Such a grouping of public buildings in one place, in accordance with the provisions of a city plan, is commonly called a civic center. It has the great underlying merit of convenience, and also possesses the greatest possibilities of artistic and architectural accomplishment. The planning of a really beauti-

ful group of public buildings has the further advantage of tending to foster civic pride, an important element in civic improvement which is unfortunately quite generally lacking, partly, no doubt, because of this very want of anything to stimulate it in our public buildings. Though the city may be handicapped in the carrying out of a comprehensive plan for all public buildings in the city, it has full jurisdiction over its own public buildings and should take advantage of that power.

Many of the city's public buildings cannot, of course, be assembled in one place. Such institutions as schools and fire and police stations must be scattered about the city to be useful, while waterworks and other public works cannot ordinarily be put in the center of the city with advantage. In the location of such structures as these, convenience, the prime consideration, is also frequently sacrificed to political interests, while in their artistic treatment they commonly leave much to be desired. The city can, by the use of the best architecture, stimulate the development of the artistic in private buildings. In this country every man is permitted to follow his own idiosyncrasies in the matter of architecture, a fact which makes greatly against the possibility of artistic streets. Heights of buildings and building lines are commonly regulated, but aside from that, any kind of architectural monstrosity is permitted. In certain European countries a building permit is not issued, even for dwelling houses, unless they are in some kind of harmony with the existing style of architecture in the block in which they are to be located.

The comprehensive city plan is a means, as we have seen, of directing the growth of the city along lines that are believed to be the most advantageous. Chief among the devices that are employed to this end is the prac-

tice known as zoning. Every city is composed of a number of different kinds of parts, presenting quite distinct characteristics, though not geographically clearly delimited. There is, for instance, the industrial section, where the factories and industries are located. There is the transportation section where the handling of incoming and outgoing goods is managed. There is the wholesale business section where the warehouses are located, commonly adjoining the transportation terminals. Then there is the retail business and office section. The rest of the city is the residence section, varying from the tenement districts, where many families live in one structure, to the single family homes. Now, as has been said, though these districts are distinct enough as far as their character is concerned, they are commonly more or less interlocked and overlapping, and in but few instances clearly defined. This failure to differentiate the portions of the city which have these different characteristics has many unfortunate consequences. One consequence has already been noted in connection with the housing problem, in that the advantages for the workers of proximity to their work tend to introduce tenements into the industrial section, which is the least fitted for human habitation. Another undesirable result is the loss in property values due to the invasion of sections of the city used for one purpose, by structures used for other purposes. A common instance of this is the destruction of residential values by the invasion of business establishments and stores, and even by apartment buildings, to say nothing of offensive industrial establishments. In every city there are certain sections that are especially well adapted for office buildings and stores, and others that are especially desirable for dwellings. Zoning attempts to assign a section of the city to each kind of activity, thus con-

centrating all industrial establishments in one place where they will be least objectionable to homes and places of business, assigning another portion of the city to stores and office buildings, and others to the various classes of residence property. Of course, this feature of city planning, like every other, must not be conceived as being a rigid and arbitrary attempt to run counter to the natural growth and development of a city, for the zones will have to be reconstituted frequently in rapidly growing cities, but it is an intelligent effort to guide the growth of the city for its best interests, much as a child is guided in its development by the process of education with a minimum of interference with its natural proclivities.

None of the phases of city planning mentioned above are mere dreams of what might possibly be done in some distant future. They are, almost without exception, merely developments that have already taken place in progressive cities in this country and abroad, though it must be admitted that American cities are, as a rule, considerably behind European cities in this regard, so far as actual accomplishments are concerned. Schemes for city planning are by no means uncommon in American cities, and the whole subject is receiving ever more attention by experts and by the public. Some reasons why progress has not been more rapid in this country are general difficulties experienced in all city planning everywhere, as, for instance, the expense. Other reasons are more peculiarly American. some of which may be briefly considered here.

In the first place, though there is something interesting and inspiring about seeing a blue print of a great and comprehensive city plan, and enthusiasm can easily be worked up over such a project, there is nothing fascinating about the slow development and execution of the

plan when it is once adopted. Could cities be born today, full fledged along the lines of modern city planning, the results would be so inspiring as to insure enthusiastic reception. But practical city planning under the most favorable conditions today, especially in the larger cities, must be a matter of snail-like progress. The enthusiasm engendered by contemplating an inspiring city plan begins to wane rapidly with the realization that at the rate of advance possible under the most favorable conditions, the plan will not be nearing completion until long after the contemplator shall have ceased to be interested in city plans. The kind of enthusiasm and imagination which can cling to a vision in the face of such painfully tardy development is not all too common anywhere, least of all, perhaps, among practical Americans. The consequence is, that when some time after the sad pace of progress has been noted, a proposition arises which is full of promise of immediate beneficial fulfillment but which destroys the far-reaching plans embodied in the blue prints, the economic principle of the value of present goods as compared with future goods becomes too strong, and the distant plan is varied to meet the present desires. In a democracy, where public opinion must be counted upon to support any such far-reaching city plan, the chance of its survival is of course much less under those trying conditions than where officials serve for a lifetime and the determination of such policies is in the hands of a more or less continuous governing class.

There are other difficulties inherent in the position of American cities. Since the all-overshadowing difficulty in the way of comprehensive city planning is really the enormity of the cost involved, if results are to be present as well as future, the question of how to meet the expense becomes immediately fundamental. In this regard Amer-

ican cities are commonly tied hand and foot. Limited, as will be seen later, by arbitrary and inflexible limitations on their borrowing and taxing powers, American cities are simply without funds for carrying on large city planning operations, which, of course, involve replanning of property that is already built upon and is correspondingly valuable. The only solution, therefore, is to impose the cost not upon the city as a whole, but upon the property owners who are benefited by the operations. The power of levying special assessments is so circumscribed and limited as to be of little value, being generally applicable to a few undertakings only, such as street paving, for instance. A much more extensive power of enlisting the aid of increased property value is needed. This could be obtained in part by creating larger benefit districts and assessing all property that enhances in value as a result of the improvements, not merely the abutting property.

But more important than this, even, is the power of excess condemnation, which is an enlargement of the power of eminent domain. Under the ordinary constitutional and legal provisions in the United States, cities may take by condemnation only so much private property as is absolutely necessary for the public work contemplated. For instance, if a street is to be widened, it may mean cutting in half the building lots on one side of the street. This may mean that the city has to pay not only for the half of the lot used for the street, but also practically for the rest of it, if it has been made nearly valueless for business purposes by the diminution in depth. And yet the city can acquire only so much of the lot as will be used for the proposed street. If now the city were enabled to purchase the whole of that block at but little more than it would have to pay for a part, and the

frontage of the next street as well, it could make a park of the useless half block and might sell the frontage it had acquired at an increase of price that would help largely toward paying for the entire improvement. This device of excess condemnation is one which has been used with great success in European cities, and which, indeed, made possible the enormous undertakings in Paris under Baron Haussmann, previously mentioned. It is not only a practicable means of securing the necessary money, but it is an equitable means of securing to the public the benefit of increased land values resulting from such improvement. Both larger benefit assessment districts and the right of excess condemnation would do much toward relieving the financial obstacles in the way of city planning in America.

Closely akin to the power of excess condemnation is the power of cities to acquire real estate for more remote public purposes, even for revenue. In the United States, it is very rare for a city to own any considerable amount of real property that is not used directly for a public purpose. Indeed, cities do not ordinarily have the right of acquiring and holding property, except for use in some such public purpose. European cities, on the other hand, particularly German cities, frequently own a majority of the real property within their limits, and some own as much as seventy-five or eighty per cent, including both publicly and privately used property. As a revenue policy, that is, as a means of securing income to the city treasury or of increasing the capital of the city, this practice is open to some grave dangers which can better be considered in the discussion of the city's finances. As a means of carrying out comprehensive city planning schemes, as a measure for preventing speculation in real estate and turning the unearned increment

from private pockets into the public treasury where it belongs, the practice is undoubtedly most valuable. Housing schemes and zoning can be carried out much more thoroughly and effectively if the city has the rights of proprietorship over property as well as the rights of governmental control. The progress which German cities have made along the lines of city zoning would not have been possible had the city not had the income and the control which came from owning a large part of the property in the city.

One more point is worth noting in connection with peculiar difficulties to be overcome by cities in America, and that is the exercise of the right of eminent domain. It seems to be a part of accepted public opinion that it is, in this country, quite proper for the individual who has something the government wants to charge the government just as much as possible without any regard to actual or fair values. So general does this attitude seem to be that, under a system of assessing damages by juries of laymen, the government is so sure of being cheated that it is generally considered cheaper to compromise a condemnation suit at the seller's price than to leave it to the tender mercies of a jury. Not only that, but in many states the law itself gives undue advantages to the owner by giving him the benefit of all factors that tend to increase the value of the property at the time of transfer. Yet nothing could be more idiotic than to allow the owner of a parcel of land, worth on the market today $10,000, to measure the condemnation value of that land by the market price of similar adjoining parcels *after* the proposed improvement has been decided upon or is known to be in contemplation. It is indefensible practices like these that make city planning such a tremendously difficult thing in American cities as compared to European

cities, where a fair regard is had to the rights and interests of the general public, represented by the government, as well as to the rights and interests of the special public, represented by the property owners.

CHAPTER VIII

PUBLIC WORKS

An ever-extending and vastly important field of municipal activity in all cities today is the construction and operation of public works. These are services which the city undertakes for its citizens, but which differ from such services as police and health protection, education and the protection of public morals, in that they are undertakings which do not in their performance necessarily require the exercise of governmental power. They include, in other words, undertakings which might conceivably be, and in many cases are, carried on by private individuals or corporations instead of by the city. They are distinguished legally from the other type of municipal functions in being considered proprietary functions in contrast to the so-called governmental functions. This legal distinction is one of considerable importance in fixing the liability of the city in damages, for instance, caused by the negligence in the performance of the functions mentioned. But this distinction is of little interest here, for the main purpose of the discussion in this chapter is to point out the most imporant problems that arise and some of the various ways in which they have been or could be solved.

The particular proprietary undertakings which will

here be considered are only those which cities commonly, though not invariably, no longer leave to private undertaking, but administer themselves. The question as to what additional undertakings should be undertaken by the city, commonly designated under the head of the municipal ownership problem, will be taken up in the next chapter. It is purposed here merely to consider those undertakings about the propriety of the municipal ownership and operation of which there is practically no difference of opinion and but little divergence in practice.

First among these general municipal undertakings stands the provision of the water supply. The intimate connection between the purity of the city water supply and the health of the citizens has already been emphasized in another place. The almost universal necessity of treating the water supply in order to make it fit for drinking has also been pointed out. The question that now arises is, how the water is to be treated in order to insure its purity. This will have to be answered differently for different cities according to the character of the supply, the amount and kind of chemical impurity, the amount of bacteriological impurity, the amount of dirt of other kinds, etc. But certain processes are so general as to be required in almost all circumstances.

First among these almost universal processes is filtration. By filtration is meant the passing of the water through some substance that will remove the impurities, the universal medium used for that purpose being sand. Sand filters are of two distinct types, the slow sand filter and the rapid sand filter. The slow sand filter is simply an artificial tank of concrete or other impervious material into which is run the water that is to be filtered. The sand that is to do the filtering is put into

the bottom of the tank to a depth of three or four feet, placed on top of crushed rock which protects the water pipes, into which the filtered water is to run and which rests on the floor of the tank. The water percolates down through the sand, which catches not only inorganic matter but also microscopic germs in the film that forms on the surface of the sand. The sand must, of course, be cleaned at regular intervals, because the rate of passage of the water decreases as the coating becomes heavier. The top layer of sand is removed and the sand depth kept equal by the addition of sand which has been dried and cleaned. The purifying qualities of the ordinary slow sand filter are excellent and the rate of filtration is rapid enough to insure a plentiful supply with a relatively small filtration space, an acre of filter bed having an ordinary capacity of some three million gallons per day, enough for a city of thirty thousand inhabitants, allowing a hundred gallons a day per head of population. On the question of the proper allowance of water per capita of population more will be said later, for it is obviously a fundamental consideration in the administration of this public service. It has been estimated that the slow sand filter furnishes water under ordinary conditions at an average cost of thirty cents a year for each head of population, showing that pure water is relatively cheap and easily obtained by this method.

The chief defect of the slow sand filter is that it clogs up too rapidly if the water to be filtered is very muddy or full of inorganic matter. The cleaning of the filter, which in the case of reasonably clear water is required but once a month, becomes necessary at such frequent intervals and takes so much time that this form of filter ceases to be economical. It becomes necessary in that

case to provide sedimentation basins in which the turbid water is allowed to stand. If the basins are connected in series and water run from the one to the other, a very large part of the suspended matter is thereby removed, and a considerable amount of bacteriological purification also takes place through oxidation and the action of coagulation, which can be promoted by the use of chemicals without impairing the quality of the water. After sedimentation has done its work, the water is passed through the rapid sand filter, a scheme not unlike the ordinary slow sand filter except that so fine a grade of sand is not used and the water passes through much more rapidly. The cleaning of the filter is much simpler, too, because it is possible in this kind of filter to force water back through the sand bed from below and so flush it out instead of draining the filter tank and scraping off the sand. The purification attained by this method, if properly managed, is sufficient under all ordinary conditions and the cost per gallon is about the same as in the case of the slow sand filter. The capacity per acre is very much greater in the case of the rapid sand filter, but the cost of operation is also considerably higher. There is, therefore, little choice between the two methods as regards cost. The slow sand filter is not adapted, as has been seen, to very muddy water, and being more expensive to install necessitates a larger bond issue, sometimes a factor of great if not determining importance in the question of providing a pure water supply. The rapid sand filtration would, therefore, seem to be better, even though it does not insure quite so high a degree of purification, not only where the murkiness of the water supply requires sedimentation basins, but elsewhere as well, since the cost of installation is lower, thus requiring less investment

of money, while the higher cost of operation can be met out of the operating revenue.

The most important consideration in the matter of the water supply being the removal of pathogenic or disease-producing bacteria, cities have in some cases restricted themselves to meeting that problem without filtering the water, by sterilizing the water with chemicals. It is quite possible to destroy the bacteria in water by the use of chemicals which liberate free oxygen to act on the organisms, all natural bacterial destruction being in essence oxidation. This method is very much cheaper than any scheme of filtration, and in the case of clear water which has only bacterial impurities, and especially if it has them only intermittently, as after heavy rains, may be recommended. But as it does not remove any other impurities, and most water that contains pathogenic bacteria contains vegetable and inorganic matter as well, it is but a poor economy. Furthermore, the danger of carelessness in the treatment of water with chemicals is greater than in the case of mechanical filters and introduces, therefore, a greater element of risk. Sterilization of the water supply should consequently be regarded as an emergency or makeshift measure only.

In addition to removing suspended matter and micro-organisms from the water by filtration it may be desirable to soften the water. Both for household and industrial use very hard water is undesirable and sometimes unusable. The treatment of the water with chemicals to soften it is not an extremely expensive undertaking and is being done in a number of cities. In the same way, water that comes from storage reservoirs may be affected by vegetable growths which can be counteracted by chemical treatment also. On the other hand, the mere storage of water is one method of im-

proving it, even from the bacteriological standpoint, though the storage basins must be protected, of course, against external sources of pollution.

The securing of a satisfactory water supply from the point of view of quality is perhaps a less difficult problem than the matter of quantity, for, as has been seen, the water from almost any source can be so treated as to make a satisfactory supply, though the expense may, under certain conditions, be very great. But with an average consumption of a hundred gallons per day for each head of the population it can readily be seen that, except in the case of cities fortunate enough to be located on large lakes or streams, the really difficult question of water supply is largely one of quantity for the larger cities. Cities have had to go to enormous expense in getting a sufficient water supply, one of the most stupendous of modern undertakings being the new aqueduct from the Catskill Mountains to New York City to carry five million gallons of water daily for a hundred miles, the cost of construction being nearly two hundred million dollars. Many European cities have had to bring water from a considerable distance, while the new Los Angeles aqueduct carries the water from the Sierra Nevada Mountains, two hundred and fifty miles through mountains and desert.

From these few illustrations it can readily be seen that the problem of the water supply is by no means local in the sense that every city can be left to look out for itself without reference to other cities. It frequently happens that a city is wholly unable to get a water supply within its own boundaries or jurisdiction, and it may require state, interstate, or even federal action, as in the case of the Los Angeles supply, mentioned above, to enable the city to acquire a suitable source of water.

The state must therefore make some provision whereby such situations can be met. Where a number of cities are close together it may be desirable to have a convenient supply used in common instead of being acquired by one city alone and used to the exclusion of the others. For that purpose water districts have been created comprising a number of municipalities and administering the common source for the benefit of all. It has already been pointed out how state action is necessary to prevent one city from unnecessarily polluting a stream or body of water that could conveniently be used by another city. This is simply another illustration of the fact that a given function, which may at first glance seem to be a matter of purely local concern, really demands a considerable measure of state control, not in derogation of any supposed rights of home rule, but, on the contrary, for the greater security and freedom of many cities against the detrimental consequences of the acts of one.

The problem of the adequacy of the supply is closely connected with, and in fact in large measure determined by, the amount of water consumed per capita of population. This can easily be understood when it is remembered that while in American cities it is customary to figure an allowance of water amounting to one hundred gallons per capita per day in deciding how much water is needed for a city, in European cities it is, on the average, considerably less than half that much. In other words, an American city of a million population would ordinarily have to install a water supply system with a capacity of a hundred million gallons a day, while a European city of the same size could get along with one of forty or fifty million daily capacity. There are, it is true, very great variations among cities both in this

country and abroad in the daily per capita consumption figures, but the above ratio is a pretty fair average. It is interesting to inquire why this great discrepancy exists, for it may obviously be due to one of two causes. Either European cities do not have as large a daily per capita consumption as would be desirable from the point of view of sanitation and cleanliness, or American cities are guilty of a serious waste of a valuable and, in some cases, a scarce commodity.

As a matter of fact, while various factors, such as the greater number of sanitary conveniences using water in this country as compared with European cities, account for some of the difference noted, almost one-fourth of the daily consumption of water in American cities is wasted, that is, allowed to flow away without accomplishing any kind of useful purpose. This waste is largely due to negligence on the part of the city itself in the use of water for public purposes, in the improper care of the distributing system, and in permitting defective plumbing in the houses, but it is also, in large part, due to the negligence of the private users in letting water run from the faucets. The waste on the part of the city itself can, of course, be prevented by efficient administration of the water distributing system. The most effective means of reducing the waste by private users is through the use of meters which record the amount of water used by each consumer. Cities have the universal experience that the introduction of water meters makes a marked reduction in the amount of water used and need not be spread over a considerable period in order to cover the cost of meter installation and reading.

That waste in such an important and increasingly expensive commodity as water should not be permitted if

it can be prevented, is a proposition to which there would be no dissent. That metering the water supply for each consumer would reduce this waste is equally evident. And yet there is considerable opposition to the introduction of the meter system in nearly all cities where its introduction is contemplated. The reason for this opposition rests on the fact that it is believed impolitic to restrict the large use of water, the most important single factor in sanitation. This attitude seems to rest on the implied assumption that the installation of water meters will mean not only diminution in wastefulness but also in the proper use of water, which would, of course, be unfortunate. No such consequence need, however, follow. If forty gallons per capita per day is regarded as an ample allowance for a liberal but legitimate domestic use, it would be perfectly feasible to make the minimum charge for that amount and everything under it, thus insuring to every user the greatest amount of water required at the cheapest rate. Over and above that liberal allowance, however, the charges for water could be made high, and increasing on a sliding scale, since for domestic purposes the surplus consumption would practically register the amount of waste. In this way there would be no tendency on the part of the poorer users to stint themselves below a reasonably liberal amount in order to save money, and yet the extravagant use would be penalized.

This brings up the important question of water rates in general. Water being such a fundamental and universal necessity, the question may well be asked: why should the city charge for the water furnished, any more than it charges for the use of the streets or for police or fire protection? Why does the cost of the public water supply not come out of the general revenues

as do the expenses of the police and health departments? It is almost the universal rule that cities do regard this as a commodity which they sell to the consumers, and not a public service which they furnish for all citizens without special charge. Probably the real explanation of this universal practice lies in the fact that water supply systems were quite commonly constructed by private companies and run for commercial gain, by charging as for any other commodity, and that when the cities took over these plants or themselves built waterworks they naturally adopted the same plan. Furthermore, the use of the water service is one which varies with individuals according to their own desires and acts, whereas the uses of the police and fire departments, for instance, made by individuals are not subject to their control. Such variations in the use of the water supply are capable of being noted and are in fact taken more or less accurately into account in every city.

Although it may be entirely fair and desirable to have the users of water contribute to the cost of supplying the water, at least approximately in proportion to their consumption, it seems that as a matter of public policy a certain amount should be allowed to every individual irrespective of payment, for, as has been said, water is a universal necessity for every citizen in the community. If considerations of public health and social welfare demand that the water supply of the city be taken over by the city and not left to exploitation by private companies for profit, it is equally true that the use of such water by citizens must not be reduced below the minimum amount necessary for sanitation by charges which, though not exorbitant as compared with the cost of furnishing water, may nevertheless constitute a serious burden for a large class of persons whose occupations

and surroundings are such as to require even a greater use of water than is necessary for those who are financially better off. In other words, as compared with the encouragement of as great a use of water by everyone as is desirable from the point of view of social and sanitary considerations, the question of financial returns to the city is secondary.

Another public service which is commonly performed by the city, and should always be so performed, though in some instances still left to private undertakings, is the disposal of the city's wastes. It has already been seen in the chapter on Public Health that the proper disposal of the waste of the city is an absolute necessity from the point of view of sanitation. The congested character of city life makes the problem of waste disposal, which in the country is a simple matter, a consideration of prime importance and of considerable difficulty. Wastes are of different kinds and are capable of different treatment according to their nature. In the first place there is sewage, by which is meant, primarily, the wastes from the human body. Secondly, there is garbage, by which is meant the unused or unusable portions of foodstuffs. Thirdly, there is trash, which includes a variety of elements, such as house and street sweepings, tin cans, papers, rags and other rubbish.

The most important and difficult problem arises in connection with the first class of waste, that is, sewage. Every modern city, as has been seen, must have a sewerage system, that is, a system of pipes for carrying away the sewage. Dry closets and cesspools are makeshifts, which, it is true, can be made much less harmful and objectionable than they commonly are, but which at best are unworthy of modern conceptions of cleanliness and sanitation. A sewerage system involves the con-

nection of the sanitary conveniences of all houses with a system of mains which carry away the sewage. The problem of a proper sewerage system and of the final disposal of the sewage are two distinct problems, though, of course, closely connected in practice. The difficulties in the sewerage system, that is, the system of pipes that carry away the sewage, are in large part technical engineering problems which can properly be solved only by the aid of expert engineering skill. Some of the questions are, however, more largely questions of policy than of engineering technicalities. There is, in the first place, the question of the size of the sewers. The measurement of the volume of sewage, which includes the wastes from all appliances using water, such as sinks, wash bowls, bath tubs and closets, is, of course, a matter of engineering calculation, but is in general roughly equal to the per capita consumption of water, where all the users of water turn the used water and surplus into the sewers. But the question arises at once as to what shall be done with the surface water from rains, which are ordinarily collected in drains from the streets. If this surface drainage is excluded, the flow of sewage is fairly proportionate to the population and does not normally vary more than does the consumption of water. The calculation of the desired size of the sewer, taking into account normal increase in population and in the use of sanitary conveniences and water for commercial purposes, is therefore a fairly simple matter. If, however, the surface drainage is not taken care of in special storm sewers the matter becomes more complicated, for not only must the sewers be much larger than would be necessary for the carrying away of sewage proper, but they must be large enough to take care of the maximum discharge, which may be much greater than the mini-

mum, thus necessitating a size which is greater than will be needed except on relatively rare occasions.

Of course, the same difficulty of estimating the requisite size remains, if the surface drainage is carried off in special storm sewers, and the same expense of building larger drains than are required for much the greatest part of the time. But the separate system of storm sewers or drains has several important advantages which seem to recommend that plan rather than the single sewer system, in spite of the additional expense that may be involved. In the first place, in times of extraordinary flood waters which may overtax even a large system calculated to take care of all reasonably to be expected floods, the single system has the great disadvantage that, if a backing up and overflow of the waters result, a serious menace to the public health arises from the discharge of sewage into houses and onto the streets. The separate storm sewers, on the other hand, even when overtaxed, do not overflow the streets with disease-laden sewage and will rarely reach the homes at all. Furthermore, as will appear later, the problem of sewage disposal is greatly complicated by the single sewerage system. The outflow from the ordinary storm sewers can with safety be discharged into streams without treatment, whereas the outflow of sanitary sewers requires further treatment in the interest of the public health of other communities. But if the storm water is carried in the sanitary sewer system, the sewage disposal plant must be so constructed as to handle the maximum amounts of discharge even in times of flood, causing a serious increase in the expense and complication of the sewage treatment problem.

Aside from the size of the sewerage system, there are many important engineering questions to be settled, such

as the best materials for the pipes, the proper grade of the sewers to insure against stoppage of the flow, provisions for ventilating and flushing the sewers, and a host of other matters. The sewer plan of a city should obviously be a comprehensive one based on the existing situation in the city with regard to the areas to be served and also on the probable developments and extensions of those areas.

Until comparatively recent times the chief problem in connection with the sewerage systems of cities were those indicated above. The sewage was collected by the sewerage system and discharged without treatment at the mouth of the sewer. The only consideration that played any part in the problem of where to put the sewage was the safety and convenience of the city itself. For that reason emptying the sewage into some convenient body of water was the almost universal method. If the city was located on the ocean the common method was, and is today, to empty it into the sea. If the outlet of the sewer was put far enough out into the ocean the interest of the city in question ceased, though many cities suffered for a long time from the inconvenience resulting from failing to carry the sewage far enough away. The health of the inhabitants was, however, not seriously endangered because the sea water was not used for drinking or cleansing purposes. But even this plan involved a certain amount of danger, because typhoid fever, the greatest source of danger to public health carried by sewage, was found to be conveyed by oysters taken from beds near which city sewers were emptied. In the interests of public health and of the oyster industry, therefore, it became necessary to insure that the sewage was carried out a sufficient distance into the ocean. Where, however, cities are located on bodies of

fresh water, even of the largest lakes, such as the Great Lakes of the United States, the emptying of untreated sewage, even at great distances from the shore, was found to be inimical to the public health not only of the city itself, but also of other cities, where, as is usually the case, the lake in question was also the source of the city's water supply. Finally, the result of emptying raw or untreated sewage into running streams, though not endangering in general the health of the offending city, was none the less objectionable from a large public health point of view. With the realization of the danger involved in the practice of dealing with raw sewage in this way arose the requirement that city sewage be treated in a way to reduce, even if it could not eliminate altogether, the pollution of water supplies.

There are a variety of ways that have been adopted for the treatment of sewage with that in view, some of the more common of which will be briefly described here. They vary considerably as to the amount of purification they accomplish, none of them, however, attempting to transform the sewage in such a way that the sewage in its changed condition could safely be put into immediate contact with a supply of drinking water without danger. Further purification will always be required either by natural processes, that is, by the natural action of the oxygen and of the bacteria contained in the water into which the treated sewage is emptied, or by means of filtration of the water supply as described above, or both.

One method of sewage disposal that is common in European cities is the so-called broad irrigation plan. Under this plan the sewage is simply carried some distance outside the city and there spread on the land by means of irrigation ditches. This involves no treatment

of the sewage, but merely discharging it in a place where it will not be offensive. It requires a great deal of land, for the amount of sewage that can be spread on an acre of land in this way without becoming offensive, though varying greatly with the character of the soil, is always limited. The land that is thus irrigated can be used, however, for agricultural purposes without danger to public health, and may, therefore, yield considerable returns.

Most other methods of sewage treatment involve as a preliminary step, the separation of the solid substances from the liquid. Sewage, particularly in American cities, is about ninety-nine per cent water and only one per cent solid matter, but it is the solid matter which is putrescible and causes the chief difficulty in the sewage disposal problem. One way of removing the solids from the liquids is simply to screen the raw sewage. This method leaves the solid matter to be disposed of in some other way and does not in any way purify the liquids that pass on with the same bacterial content as before. Another way, and one that has been used considerably in this country, is to separate the solid matter, or sludge, from the liquid matter, or effluent, by means of sedimentation, which permits the sludge to settle on the bottom of a tank and the effluent to flow off. This step is a preliminary to various plans of sewage treatment which differ principally in the method of removing the sludge and the treatment of the effluent. Simply to rely on settling basins is no more effective than the screening process, for the sludge remains to be disposed of and the effluent is not purified in any way. Yet both screening and settling, hastened by the use of chemicals to precipitate the solid matter, and hence known as chemical precipitation, are in use in a number of cities

as the sole method of sewage treatment. It is obviously better to have this done than nothing at all, for the putrefaction of the organic matter in the sewage which is such a serious nuisance is in that way prevented. But the handling of the sludge is itself a difficult matter and may also give rise not merely to noxious odors, necessitating the location of the sewage works at a considerable distance from human dwellings, but also, of course, to sanitary dangers if not properly protected against flies. Burning or disinfection of the sludge will therefore be necessary in either of these cases.

A more elaborate variation of the sedimentation process is by means of the so-called septic tank. In this process, decomposition of the solid matter in the sewage is occasioned in the tanks and a much smaller amount of sludge is left per gallon of raw sewage than in the case of ordinary sedimentation. This sludge must also be removed at stated intervals, though less frequently than in the case of the ordinary chemical precipitation, and the effluent is also practically as dangerous as before, though some purification occurs in the process. It is possible, however, to operate the best forms of septic tanks without creating a serious nuisance, even in the immediate surroundings. A recent improvement of the septic tank process, which seems to promise good results, is the so-called activated sludge process, whereby the breaking up of the solid matter through aerobic bacteria is greatly facilitated by the forcing of air bubbles through the bottom.

Other methods of sewage treatment are based on the process of filtering the raw sewage and drawing off the effluent below, leaving the organic solid matter to be purified by contact with the air. This plan has the great merit not merely of making the organic matter inoffen-

sive, but also of purifying to a considerable extent the effluent itself, much on the same principle that the filtration of the water supply itself operates. Even the most effective of several methods of filtration, from this point of view, the so-called sprinkling filter system, does not leave the effluent free enough from pathogenic bacteria so that it could be turned immediately into a water supply without serious danger to the users. All of the filter systems of sewage treatment are based on the principle of the purification of the solid matter in the pores of the filter beds by allowing the action of the air and of bacteria to work upon it. The effluent itself can be completely sterilized by the use of chlorine.

The eternal practical question recurs again as to what kind of sewage disposal is the best, and the same unsatisfactory answer must be given, "That depends." It depends, in the first place, on what it is believed a sewage disposal plant should do. We have already seen that the absolute and complete purification of sewage is hardly to be considered the practical ideal to be adopted, though it can be practically attained at a considerable expense. Where there is no way in which the effluent from the sewage of one city can be kept from coming into immediate contact with the source of an otherwise pure supply of drinking water for another city, it may be fairer to impose the cost of health protection on the city that is the sole cause of the pollution, rather than on the city which is threatened. But such is rarely the situation. Generally the effluent will be discharged into a stream or other body of water at some considerable distance from the intake of the nearest city waterworks, and natural oxidation can meanwhile do a good deal toward purifying the effluent by dilution. If the conditions of flow are right, the original pollution may en-

tirely disappear before the water reaches the next source of water supply. Furthermore, there is usually the danger of pollution from other sources along the waterway that make it necessary for the city to filter its water anyway as a measure of public health protection. In that case the removal of the organic matter and a reasonable dilution of the effluent may be all that is required, since no additional burden is imposed upon other communities. The system of sewage farms or broad irrigation has this obvious merit not only of leaving the ground used for sewage disposal available for agriculture, but also of keeping the sewage of the city entirely away from other communities, the liquids which flow off through seepage being ordinarily sufficiently filtered before they reach any possible source of water supply. Next to the question of reasonably safeguarding other communities, which is the chief factor in bringing about the abandonment of the formerly universal practice of emptying raw sewage into the nearest watercourse or other body of water, comes the fundamental question of cost. As in the case of almost all municipal undertakings requiring the use of land for administration and the use of materials and labor, skilled and unskilled, for construction and operation, it is impossible to make statements of cost that will hold good for more than one community. Great variations exist in the matter of initial cost and cost of operation of the different methods. Furthermore, as in the case of sewage farms, for instance, or in the disposition of the sludge, there is the possibility of some financial returns from the products, though in no case are sewage disposal works capable of maintaining themselves from such sales. Finally, there are differences of soil and of climate, which may make a system of sewage disposal that works well in one

place utterly unsuited to the conditions found in another place. Extreme cold, for instance, makes any of the methods of filtration more difficult, while clay or other impervious soil may make broad irrigation out of the question. Nor are the methods of sewage disposal enumerated above by any means the only methods that have been devised, though they are the ones most commonly in use. New methods of treatment are being developed which, when perfected, may prove to be clearly superior to any now in use. That consideration would seem to be an argument in favor of adopting the system which, if otherwise satisfactory, requires the smallest investment of money in a plant that becomes valueless if no longer used for the purpose for which it was constructed.

The matter of sewer charges presents an interesting question. Although in Germany, and in some cities of this country, users of the sanitary sewers are charged a certain rental, the overwhelming practice in the cities of the United States is to furnish sewerage free and pay for the operation of the sewer system out of the general revenues. This almost universal practice seems to be based on the conviction that sewerage is a common municipal service, to be rendered without charge, though the cost of laying mains and making connections is frequently charged, in part at least, to house owners. The interesting question that at once occurs is, why should sewerage service be treated so differently from water service? A system of sanitary sewers is certainly no more intimately connected with the public health than is a pure water supply. Water is an absolute necessity and the lack of a pure water supply is one of the most serious situations that can confront a city, whereas, as has been seen, dry closets and cesspools can be used and

are in some places used, in a way so as not to constitute a serious menace to the public health. If people are compelled to rely on private wells for their water, the danger to their health may be greater than if they are compelled to care for their own wastes. The only difference would seem to lie in the fact that the lack of service by the city's pure water supply constitutes a danger primarily for the individual, whereas the lack of service by the city's sewerage system constitutes a danger and a nuisance for others. This distinction is only partly a true statement of the case and does not seem to warrant the fundamental difference in the practice of American cities which has just been noted. The same reasons that operate to make the expense of the sewer system a public charge would seem to apply in the case of the water supply, at least within the limits suggested above when the matter of water rates was under consideration.

As distinguished from sewage, the other wastes of the city present a less serious problem, at least from the health point of view. The other wastes may be classified as wastes that accumulate on public property and private or house wastes. The former include principally street sweepings, which may contain both organic and inorganic matter. The necessity of cleaning the streets is partly one of traffic needs, partly one of esthetics, but mainly one of public health requirements, particularly where organic matter comes into question. Dirt and filth of this kind are the chief breeding places for flies and the home of disease germs, and the city must, in consequence, see that its streets do not become a menace to the public health. As has already been suggested in another connection, the rapid displacement of the horse by the automobile in city streets simplifies the problem

of street cleaning considerably, for it eliminates a disagreeable and difficult element in the street sweepings. The work of street cleaning, like that of the care for sewage, consists of two parts, the collection of the waste and the disposal thereof. The collection is a relatively simple proposition, as it requires merely sufficient men and instruments to carry it on effectively. Numerous mechanical devices have been perfected for sweeping the streets, but the actual work of collection is usually done by a squad of men with hand brooms and shovels. The work has to be done for the most part at night, at least in the busier streets, though some work can and should be done throughout the day in collecting papers and other litter that blows about the streets. The street sweepings are sometimes merely flushed into the sewers, but to this plan there are serious objections, particularly if the same sewer takes care of sewage and of the surface drainage, for street sweepings contain matter that does not yield readily to the treatment of sewage in any of the ways considered above. Even if there are separate storm sewers large enough to take care of all sweepings that may be flushed into them, the effluent from the storm sewers may become a nuisance. It is the common practice, therefore, to cart away the street sweepings. The vehicles used for this purpose must be of particular construction to prevent the blowing about of the sweepings from the carts back onto the streets.

Street sweepings may be disposed of in several ways. Where there is still considerable horse-drawn traffic in the streets the sweepings consequently contain a large amount of manure, which has some value as fertilizer. The cost of transportation to the point where the fertilizer can be used is usually, however, at least in the case of the larger cities, greater than the market value

of the sweepings as fertilizer, and that method is therefore rarely practicable. The two commonest ways of disposing of such sweepings are to burn them, for they are composed largely of readily combustible matter, or to cart them to low ground for filling. In either case the expense of carting them through long distances is a very considerable item in the street cleaning cost. In the northern cities of this country the problem of snow removal is a serious one from the administrative point of view, because it usually calls for an extraordinary force of men for a short time and at brief notice. The removal of snow from the sidewalks, like the care of the condition of the sidewalks in general from the point of view of cleanliness, is left to the individual property owners. But as these commonly deposit both the sweepings and the snow in the street in front of the property, it amounts merely to adding to the amount of material to be removed by the city. Snow is frequently removed in carts, like street sweepings, but an effective method of getting rid of it in streets where there are large storm sewers is to have good-sized openings at frequent intervals into which the snow can be emptied and carried away as it melts.

A third important class of city wastes are the house wastes, that is, those wastes from the houses in the city which are not emptied into the sewers. This kind of waste has been variously classified for purposes of treatment and does, in fact, present certain differences which are important from the point of view of the manner of collection and disposal. Generally speaking, house waste comprises organic and inorganic matter. The organic matter is the remains of food used in the house and is commonly called garbage. The inorganic matter comprises ashes, papers, tin cans, sweepings, and all the

odds and ends that are commonly thrown out of the house under the name of trash. The collection and disposal of these various house wastes are just as truly functions of the city as are the collection and disposal of sewage. Though the sanitary consequences of failure to treat this class of wastes may not be so immediately serious as they are in the case of failure to handle the sewage problem efficiently, nevertheless cleanliness and public health are impossible without proper handling of all these sources of dirt. This is particularly true of the organic matter called garbage, which, especially in the summer time, quickly becomes a source of noxious odors and, as a breeding place for flies, a real menace to public health. Curiously enough, however, the collection and disposal of garbage is more frequently left to the individual householder than is the disposal of the less offensive and dangerous class of waste that contains merely inorganic matter.

Where both classes of waste are collected by the city, it is not uncommon to require that they be kept separate and deposited in distinct receptacles. This provision is intended to facilitate the final disposal, for the two kinds of waste may be and should be differently treated. The separation of the waste, however, imposes added expense and trouble on the householder and necessitates more men and wagons for the city. Both receptacles should be provided with tight covers to keep out flies. The frequency of collections will, of course, depend somewhat on local conditions. In cold winter climates the accumulation of ashes is very rapid during some months of the year and practically nil in others. On the other hand, during the hot summer months garbage must be collected frequently, irrespective of volume, in order to prevent putrefaction and disagreeable odors.

The inorganic matter can be disposed of with comparatively little difficulty by incineration or by using it for fill. Garbage can also be incinerated, though it is not such a simple matter, but it cannot be used for dumping without great offense to surrounding property and danger to health. A number of plans for treating garbage have been devised which are intended to preserve some of the usable elements in the garbage, such as oils and fats. The process of reduction, of which there are several different kinds in use, extracts the oils and fats for commercial use and leaves a residue which can also be used for fertilizing. It is not likely that any great profit can be made out of any of these plans over and above the cost of operation, but at least some returns can be had, and the fact that private companies find it profitable to operate such plants would tend to show that it was worth while for the city to do so as well. Where the garbage is not kept separate from the other wastes they can all be consumed together by their own heat. Where garbage is kept separate and the other wastes are picked over for the removal of non-cumbustible matter, there is a surplus of heat generated by the combustion which can be used to some extent for other purposes, such as generating steam for power plants, etc., but it is doubtful how far this can really be done with profit.

The furnishing of a water supply for the city and the taking care of the city's wastes are the two most common forms of municipal works in this country. There are others, like electric light and gas works, which are not uncommon as municipal undertakings, either in this country or abroad; still others, like markets and street railways, which are uncommon in this country but quite general in European cities; and yet others which,

like the milk supply, might very properly be undertaken by cities, but are not, as a matter of fact, generally considered as municipal undertakings either here or elsewhere. The relation of the city to some of these other public services will be considered in the following chapter. There remains to be considered here only one rather mooted question with regard to one of the more common of municipal undertakings considered above. That is, the question of whether the city, though considering the works in question properly a matter to be provided and paid for out of the public treasury, should itself employ the labor required for the construction and maintenance of the streets, for instance, or should let it be done by private concerns under contract. There are many arguments advanced in favor of each of the two plans, some of which are well founded, while others are purely specious. The advocates of each plan are prone to overemphasize the good possibilities of that plan and the defects of the other, until one is driven to the conclusion that here, too, no general and dogmatic answer is possible.

Under ideal conditions it seems safe to say that the direct system is better than the contract system. That is, if the city could and would employ as good labor and help throughout at the same rates, and purchase materials at the same prices as are paid by private concerns, it is clear that the profits of the undertaking, instead of going into the pockets of the contractors, who, of course, expect and obtain a reasonable profit from the work, would inure to the benefit of the public through a saving to the city treasury. These ideal conditions, however, presuppose a situation that rarely if ever exists, namely, efficient, non-political administration at every stage of the proceedings. Quite commonly inefficiency in the en-

gineering department, lax direction of the laborers, carelessness, favoritism or even corruption in the purchase of supplies much more than wipe out the profits which an efficient, upright contractor could legitimately make out of the job. As compared with the best results that are obtainable under the contract system, the direct system as actually worked in our cities shows up to a decided disadvantage, and it would seem that the contract system is obviously the better plan.

Unfortunately, however, a satisfactory contract job is about as rare, under actual conditions, as is an efficient direct job. Contractors themselves are frequently inefficient and quite as often indifferent to any interests other than their own, and as ready to engage in corrupt practices as are the officeholders with whom they deal and those who would have the work in charge if done directly by the city. Contracts are often let upon the basis of favoritism or collusion, instead of fair and free competition, their terms are not clear, and their enforcement is lax. Under those conditions it is manifest that the interests of the public are quite as likely to suffer as regards the character of the output as they would under the direct system, inefficiently managed. It is true that many devices have been suggested for insuring that the competition is fair, that the work is done for the city at the lowest reasonable price, and that the quality of the completed job shall meet the specifications of the contract. These devices are, however, in no case automatic, and depend in the last analysis on the ability, energy, and honesty of the human beings charged with their application. If these conditions are lacking, these so-called safeguards become worse than useless, for they lull the public into believing that everything is safe and that their interests are in some mysterious manner put

out of harm's way. If the experience of direct municipal administration has a disheartening record of wastefulness and corruption to show, so has the story of the contract system of constructing public works.

The choice would seem, therefore, to lie, in this country at least, between two evils. If the administrative branch of the city is both inefficient and dishonest, as is sometimes the sad situation, there is obviously no hope from either the direct system or the contract system. If the administrative service of the city is inefficient but honest, a situation that is, perhaps, the normal one, in spite of pessimistic views that the first hypothesis represents the normal case, it is possible that the contract system can be safeguarded sufficiently in the interests of the city, though the relative inefficiency of the city's officials, even as supervising organs, puts them at a disadvantage with astute but self-interested contractors. If the city should have real ability available in its administrative departments, it is not improbable that the public control in the interests of honesty might be more effective where the city itself does the work than where it looks merely to the difficult and somewhat obscure task of seeing that complicated contract conditions are complied with.

The fourth alternative set forth above, namely, that there are both efficiency and honesty in the public works' administration of the city, by far the rarest case of all, seems to be the only one in which the system of direct administration shows obvious advantages over the contract system when considered in its best light. Local conditions will therefore in this matter be largely determinative, but, generally speaking, honesty may be regarded at present as an end that is much nearer being attained in American cities than is administrative effi-

ciency. As the work of supervision does not involve so many problems of administration and technical expertness as does the work of direct administration, it would seem that, under ordinary conditions today, there was somewhat more promise of satisfaction under the contract system admitted under the approved instruments of control, than under the system of direct administration. This, it must be understood, is largely a matter of opinion, for the evidence obtainable from the cities that have experimented with the two systems is quite conflicting and, on the whole, not very convincing. In a measure, therefore, the answer will depend on general questions of policy with regard to municipal activity, much like those involved in the mooted question of the ownership and operation of public utilities in general, which will be taken up in the next chapters.

CHAPTER IX

PUBLIC UTILITIES [1]

Perhaps one of the most mooted questions in the field of municipal functions today is the one concerning the relation of the city to certain services, commonly designated as public utilities. In a broad sense, of course, every activity of the city must be directly or indirectly a public service, else it has no excuse for existence. But what is meant by public utilities, in the sense in which that term is now so commonly used, are those undertakings, in which something in the nature of a salable commodity is produced and sold to the public as users, which private capital finds it profitable to provide, differing therein from police protection, the care for public health, and the other so-called governmental activities of cities. Though the general distinction between public utilities and strictly governmental functions is not so difficult to draw, the determination of what private enterprises are public utilities and what are merely private business, is a much more difficult matter. Generally speaking, public utilities are those undertakings which are affected with a public interest, but that definition

[1] This subject is also treated at length in King: The Regulation of Municipal Utilities, 1912, D. Appleton and Company, Publishers, New York.—EDITOR.

does not define, for the question still remains: what is the public interest which will put an undertaking into the class of public utilities? Here, at the very outset, we come upon a fundamental philosophic or theoretical divergence of views which runs through the whole complicated matter of public utility discussion and accounts for the inconclusiveness of the arguments usually advanced pro and con in the various phases of the problem. In the most extreme sense there could be said to be no individual or corporate undertaking of whatever character which is not affected to some extent with a public interest. That situation is simply the result of the complicated and interrelated social life of today. Scarcely anyone, of course, could be found to conclude that for that reason every activity, business and otherwise, of the individual from birth to death should be controlled and directed by the government. The socialists, it is true, are convinced that all means of economic production and distribution are so vitally affected with a public interest that the state should not merely supervise them very carefully, but should itself control and administer them. Between that extreme position and the ultra conservative view of the supporters of a thoroughgoing *laissez-faire* policy, there is somewhere a mean which has today the support of the great majority of thinking people, though the location of the line between businesses that are affected with a public interest sufficiently to demand government action and those that are not, will probably not be drawn at exactly the same place by any two persons. In order to crystallize the discussion as a practical problem of municipal administration, it will be necessary to point out some of the elements that have so far been commonly considered as affecting a business with a public interest to the extent of raising a govern-

mental problem. So, for instance, the monopolistic element in a business, both at common law and in modern legislation, has been considered as introducing the necessity of governmental action. Potential dangers to public safety, health, or morals, in a particular business have affected that business with a public interest to the extent that, if it was permitted to continue at all, it must be under regulation. The necessity of a public franchise or permission to do something not of common right, such as making a special or unusual use of public property, was another element that ear-marked an undertaking as a business affected with a public interest

These are still more or less general definitions which must be made more concrete before a fruitful discussion of the problem can occur. Among the most common of businesses affected with a public interest, which are included under the name of public utilities, are waterworks, lighting plants, both gas and electric, transportation, telephones, slaughter houses and markets, cemeteries, and a number of other undertakings which are commonly regarded as public utilities in European cities, but which are not yet so considered, as a rule, in this country, as, for instance, theaters, pawnshops, restaurants, etc. The term public utilities is restricted in discussions in this country usually to the first four classes of undertakings mentioned, and it will be noticed of them that they all involve a special use of the city streets for pipes, wires, or tracks, and must consequently obtain a franchise or permission to make this special use of the public streets. Furthermore, the right of eminent domain or condemnation of private property was commonly also given to these interests.

At the time when franchises were first granted to use the streets of American cities for purposes such as these,

there seemed to be no general conviction that in return for these privileges by the public, in both public and private property, which contained the possibilities of tremendous financial benefits for the grantees, the individuals or corporations owed any obligations to the public in return. It is true, of course, that in many cases the persons most interested, that is, the citizens of the community whose streets were thus turned over in part to private interests, had nothing to say in the matter, as the state legislatures exercised the right to make such franchise grants. But even after that abuse was halted, and cities were masters of their own affairs in this regard, public opinion did not for a long time see the need or desirability of securing, in any way, returns to the public from these valuable grants. It seems to have been considered that the individual or corporation was doing enough of a service to the public by offering these facilities, no matter in what manner or at what rates.

Gradually, however, it came to be realized that a water supply, a lighting system, and transportation facilities were not merely conveniences for the public which they could purchase from the companies or not, as they chose, and could therefore be left to do their own bargaining, but that they were necessities under conditions of modern urban life and that the owners of the franchises were in the position of being able to charge, for a necessity, practically any prices they wished, within very large limits. Then it began to be appreciated that the city, in conferring these franchise privileges without any safeguards in them, was guilty of aiding private interests to practice extortion on the public. The public utilities were naturally interested in earning the greatest returns, and in the absence of compulsion, subordinated all considerations of rates and service to that one end. In the

case of other businesses, even those dealing in the absolute necessities of life, such as food, reasonable rates and service were more or less automatically secured through the application of the principles of open competition; and even the English Common Law from an early date sought to conserve that safeguard by declaring monopolies and agreements in restraint of trade contrary to public policy, and so illegal and void. But even this protection for the public was lacking in the case of franchise grants for public utilities. In many cases the franchise grants themselves were exclusive or monopolistic and precluded the possibility of competition. As if still further to exclude the possibility of any wholesome restraining influence through transferring the franchise to another corporation upon its expiration, in the hope of getting better service and cheaper rates, these franchise grants were not uncommonly given in perpetuity.

There was an even more fundamental factor involved in the insufficiency of competition as a measure of regulation in the interests of the public than the mere granting of monopoly privileges, for that really only confirmed, in legal form, an existing economic situation. All of these undertakings, as well as many of the others that are frequently spoken of as public utilities, are what are termed natural monopolies. That is, they are undertakings which in their very nature are not only capable of the most economic and efficient management when run as monopolies, but could, for other reasons, not be thrown open to competition without detriment to the public. Waterworks, for instance, afford a good illustration of a natural monopoly of this nature. To have real competition in the furnishing of the city's water supply there would have to be two or more waterworks. But frequently there is but one source of supply avail-

able. Furthermore, the expense of filtration plants, pumping stations, and service pipes is, as has been seen, considerable. Even if water could be gotten from two different sources, the charges which a waterworks serving one hundred thousand people would have to make in order to yield a profit would be greater than those required for a plant serving twice that many persons, for so large a share of the cost of waterworks consists of overhead charges, that is, interest and depreciation charges on the original investment. Each new user can be served more economically and the service cost, therefore, decreases with the increase in the number of persons served.

But the money item is not the most serious aspect of the situation, though it shows that in that case competition would, even under the most favorable circumstances, increase very materially the per capita cost of service, though perhaps not the actual price charged if the monopolistic company was charging exorbitant rates. It does show, however, that so far as reducing rates is concerned, it is much better to have one water company under proper regulation than to have two under free competition. The more serious aspect of such competition lies, however, in considerations of general welfare. The laying of water pipes in the streets of a city involves a great deal of inconvenience, loss of time, and even financial injury both to the pedestrians and vehicles using the streets and to the owners of abutting property. A certain amount of this inconvenience, to which must be added the necessity of frequent repairs and the danger from frozen or burst mains, is obviously a condition of getting any water service. But a multiplication of this inconvenience two or more fold would more than offset in public inconvenience any possible benefits that

might come from competition. It is out of the question, therefore, to rely upon competition as a natural and automatic means of regulation in the case of such a utility as waterworks.

The same situation arises in connection with electric light and gas plants, each of which requires the use of space above or below the streets for pipes or wires. In the case of street railways, the situation is even more apparent. To allow competing railways to lay double sets of tracks in the traffic streets is everywhere undesirable and, in many cases, impossible. To have them run in different parts of the town affords no competition and to have them parallel each other on different streets is usually impracticable, for there is generally one street which is the natural artery of street car traffic and would therefore prove to be more profitable. One public utility in the case of which competitive activities are perhaps most common is the telephone service. In many cities there are two or even three telephone companies, and it is supposed that an element of beneficial natural regulation is thereby attained. The same objections exist, however, in the case of the telephone service, that were urged in regard to competitive water or light plants, though, perhaps, to a somewhat lesser extent. Testimony from cities having the double service is almost always to the effect that the system is unsatisfactory and that one company would be much better. Other factors enter in to prevent the play of free competition even under these conditions, and the only result is that the public, at least the business and professional public, is put to the expense and trouble of having two telephones in use instead of only one.

Competition being excluded by the operation of natural and economic conditions, it is obvious that govern-

mental regulation becomes necessary. Briefly stated, the purpose of governmental regulation is to insure to the public reasonable service at reasonable rates. This means that the public service corporations are under obligations, in return for their franchise rights, to render satisfactory service to the public at as low a rate as is possible with good management and reasonable returns. In other words, the old common-law principle has now come to be generally accepted that public utilities operating under a franchise are not legitimate instruments for reaping enormous profits, but are to be limited to a reasonable return to the investors, the excess going into better service or cheaper rates. As a statement of the principle underlying the proper relation of public service corporations to the public, that proposition would seem to receive today almost universal assent, except, of course, from the holders of stock in such undertakings. As the newer policy of legislative regulation, it has received widespread application in this country, with the approbation of the courts. On the face of it, that simple statement of the point of view to be kept in mind when attacking the problem of public utility regulation would seem to promise a relatively simple task in its application. Unfortunately, however, there is considerable difference of opinion as to the best means of putting this generally accepted policy into effect and even greater diversity in the results accomplished when it has been tried.

There are, to begin with, no fixed standards for determining just what service should be demanded. Obviously the very best service conceivable irrespective of cost cannot be intended, for that would inevitably raise the cost, and cheapness of service is an equally important consideration. The relative emphasis to be placed on

the two mutually interrelated elements, service and cost, is therefore one fundamental question of policy that has to be agreed upon before a scheme of regulation can be put into effect. This relationship will vary somewhat in the different utilities. In the case of the water supply, for instance, the purity of the water is such a fundamental consideration from the point of view of public health, that a safe supply of drinking water must be insisted upon, practically irrespective of cost. In the case of the transportation utility, on the other hand, the frequency and rapidity of the service are not such vitally important matters that they should be carried to extremes from the point of view of cost. It may be very pleasant to have a street car service every minute, but if the traffic is so slight that only a few people ride in each car, the cost per person is, of course, greatly increased. In that case five-minute service, which fills the cars without overcrowding, is obviously better at a given rate than would be one-minute service at a higher rate. The shameful history of public utility extortion and robbery has had the unfortunate consequence of getting the public into the frame of mind that any and all service demands, no matter how extreme, can be insisted upon, without affecting the cost of the service, a manifestly ridiculous and unwise attitude. If we recognize rate regulation as a part of every sensible scheme of public utility regulation, then both common sense as well as legal and constitutional principles require that beyond a certain point improvements in service must mean increase in rates.

Even more difficult than the determination of what constitutes reasonable service is the question of reasonable rates. To say that reasonable rates mean a reasonable profit from the undertaking and fixing that profit

at, say, six, eight, or ten per cent, does not settle the matter by any means. What charges shall be allowed to be deducted as expenses, and, an even more controversial question, how shall the value of the plant on which the six per cent profit shall be allowed be estimated? The fair valuation of the capital of a public service corporation is indeed the first step in rate making. But what is a fair basis for such valuation? It is generally agreed that "water" in the capitalization should not be taken into consideration. This is increased value, resulting not from increased plant or improvements, but merely from increased earning power due to increased use of the utility and covered by the issue of new stock to stockholders in order to make the earnings appear smaller than they actually are. To squeeze the water out of stock held very largely by innocent purchasers at a fair price is, in itself, an undertaking fraught with great difficulty and the likelihood of great injustice to individuals.

But even to determine how much of the capitalization is water and how much legitimate value is very difficult. To take the value of the physical plant as a basis would seem to simplify the problem and leave it merely a matter of engineering computation. But, even here, the fundamental question is one of policy again. Shall the value of the land be taken at the time the land was acquired or at current market rates? If the land has increased in value, as is almost without exception the case, shall the stockholders of the corporation enjoy the increase in the shape of greater dividends or additional stock, or shall that increase not be taken into consideration? Other individual or corporate owners of land are permitted to profit by the increase of land values to which they have not contributed, why not corporations that are

so-called public utilities? As will be seen in another chapter, the question of securing to the community the so-called unearned increment, that is, the increase in land values, due to social as distinguished from individual causes, is one that is receiving more and more attention, not only as a measure of social justice, but primarily as an aid in the increasingly difficult problem of getting revenues for the city. Whatever may be thought of the justice or expediency of that plan in relation to private property not affected with a public interest, there is a growing tendency to think that in the case of public utilities, which serve the public under franchises, the social values in the increase of land owned by the utility should accrue to the public in the way of cheaper rates or better service. In the case of existing corporations, operating under franchises which make no mention of the question of increasing land values, the courts are of the opinion that the public utility corporation is entitled to capitalize that increase. The courts in the United States, it may be noted at this point, with their exaggerated view of the sanctity of private property as opposed to public interest, developed under the due process clause of the Federal Constitution and similar clauses in the state constitutions, are one of the most serious obstacles in the way of social measures of all kinds in American cities, as well as in the states and the Federal Government itself.

Very similar to the question raised by the increase of land values is the question of the valuation of the buildings and plant of the company. Shall the original cost of construction be taken as a basis, with due allowance for depreciation, or shall the cost of reproduction be taken as the basis? With the cost of building steadily on the rise, the utilities naturally claim that their physical

plant has a real value equal to the cost of reproduction, if the plant has been kept in good repair and is as well adapted to do its work as it was when erected or as a new one would be. The cost of reproduction is, of course, the determining factor in the market value of all private physical plants, rather than the cost of construction. On the other hand, suppose the plant has deteriorated in value, though kept in good repair, through being obsolete, shall the original cost of construction be allowed to figure in the capitalization, or shall only the diminished value be taken into account? Here, again, the answer that is today generally accepted is the one favorable to the public. The public service corporation is entitled to charge only such rates as will yield a reasonable return on the real value of the capital actually put into it by the activities of the corporation. If the value of the physical plant has increased by reason of a general advance in prices with which, of course, the corporation had nothing to do, the public and not the corporation should profit thereby, even if, on the other hand, this increase would mean an increase in the market price of the plant. If, however, the plant has deteriorated by not being kept in repair or has become obsolete by reason of new inventions or processes, the diminution in the value of the plant represents a diminution in the value of the capital, which must be reflected in the profits that are allowed the company. These are questions on which the representatives of the public service corporations and the champions of the public are directly at loggerheads, with the courts again favoring the contentions of private capital even when granted franchises for the purpose of serving the public. There are many other mooted questions in the matter of physical valuation of the plants with regard to what may properly be

taken into consideration and capitalized and so made the basis for retaining larger earnings. Some of them are technical matters of engineering science, but most of them rest in the last analysis upon fundamental differences in policy.

Aside from the physical values involved in the capital of public service corporations, there are intangible values which may play a much more important part in the earnings and so in the market value of the shares of stock. These intangible values, that is, everything not represented by the physical value, are commonly spoken of as the water in the stock, for they represent no actual investment of money or labor. Part of this intangible value is commonly ascribed to the "goodwill" of the business, which is a very important item in the selling value of any private business, consisting of the trade or custom of the business as a result of its period of activity and good reputation. This goodwill, it is claimed, constitutes an important part of the value of a public service corporation as a going concern and should therefore be taken into account. On the other hand, it is argued that the goodwill of a business is an element of marketable value only if the business is competitive and purchasable, that is, if a private company or corporation dissolves without turning its business over to a successor, the goodwill of the company is absolutely without value so far as the stockholders are concerned. Now public service corporations enjoying franchises from the city are not in the position of the private corporations, for two reasons. In the first place, dealing as they do with monopolies in what are practically necessities, their business is very little affected by elements of goodwill. People must have water, and if there is only one water company and the city does not see that

it furnishes good water in plenty at cheap rates, the people simply have to buy poor water in inadequate amounts at high rates. The business goes on much the same, no matter how unsatisfactory the service is. In private business, on the other hand, where the element of competition enters in, the goodwill of the business consists largely in giving better service at cheaper rates than do competing firms. A firm that gives poor service and charges high rates in a private competitive business has no goodwill to capitalize and sell.

In the second place, the public service corporation is not potentially in the market as a purchasable concern. The franchise is issued to a particular corporation and that corporation is not in a position to sell out to any other concern. Consequently, even if there were a goodwill element in the business, it has no market value simply because there is no market. Consequently, there seems to be no basis for assigning any capital value to the goodwill of a public service corporation, at least in the case of monopolistic undertakings operating under a franchise, which is the character of all the services here under consideration. This, too, is an element which the courts are inclined to permit being added to the capital value.

A final element in the capitalization of public service corporations, which is the subject of much dispute, is the so-called franchise value, that is, the money value of the right to do business in, over, or under the streets of the city, the principal element of which is, of course, the monopoly privilege. In former times, when the matter of service and rates of public utility companies was still a matter of unconcern to cities, the value of the franchise lay in the exclusive right to practice extortion upon the public without let or hindrance. The value

of such a franchise was, of course, measured by the possibilities of financial returns from the utility, and the enormous value of such franchises can best be judged by the large sums spent by the promoters in buying liberal franchise grants which soon reimbursed their owners many fold for the large outlays involved in buying official favor.

The days of non-regulation in public utility matters are fortunately over, and the question naturally arises: What actual money value have franchises, as such, under a system of insuring reasonable service at reasonable rates? If public policy demands that public service corporations be prevented from making more than a reasonable profit on their actual investment, then, of course, the chief element of value in the old franchises is destroyed. What remains represents, then, merely the value of the permission to engage in a certain business under strict conditions intended to preclude the possibility of more than reasonable profits. The public utility corporation is, therefore, no better investment than any private undertaking, viewed from the point of view of risk and profits. The chief value of the franchise lies in the safeguard against unfair or ruinous competition as long as satisfactory service is rendered at reasonable rates. So far as that protection still has a real money value, the question arises: Is that a legitimate part of the capital of the company which can be taken into account in evaluating the corporation? If the company paid for the franchise in the first place, under a legal agreement with the city, then the franchise represents a capital investment of just that much and is a legitimate element in the capital value. But if the city did not sell the franchise privilege to the corporation, then the franchise value was conferred by the public for the purpose of

permitting the service to be undertaken, and the public, not the corporation, is the equitable owner of that franchise. It should obviously, then, not be taken into consideration in estimating the value of the corporate capital in that case.

Having pointed out some of the elements that enter into the policy side of public utility regulation, so to speak, the next question to be considered is how the principles enunciated above can be applied in practice to the public utility problem. This problem has two distinct aspects today which are capable of and require quite different treatment. The one aspect of the problem relates to the corporations that are already doing business under franchises granted in the dark ages, so to speak; the other relates to corporations that are to be granted franchises in the future. In the former case the sins of the fathers are being largely visited upon the children unto the third and fourth generations, owing to the American doctrine that a corporate franchise contained in a charter is a contract, the impairment of the obligation of which is forbidden both by the Federal Constitution and by state constitutions as well. The remedy in such cases is more difficult to apply and will ordinarily not be so effective, though fortunately several fairly powerful weapons are left to the public even in such cases, as will be seen a little later.

The more hopeful situation, by far, exists where old franchises are about to expire and must be renewed, or where new franchises are desired. There the franchise-granting power is in a position to bargain effectively with the franchise seekers and to embody in the franchise the terms and conditions necessary to insure that the public utility will be operated with all due regard to the interests of the public as well as those of the corporation.

In this connection it seems desirable to point out a consideration which would seem to be so self-evident as to require no comment, but which, owing to the general attitude of a large part of the general public on these matters today, is likely to be wholly overlooked. Public utilities are, as has been seen, practically public necessities under modern municipal conditions. They are, however, also private undertakings for profit. That profit, it is true, should not be allowed to be excessive, but if it is not allowed to be reasonable, the public utility will no longer prove an attractive field for the investment of capital. Even if there were no constitutional restrictions in the United States protecting existing corporations from regulation which is in effect confiscatory by denying the possibility of reasonable returns, it is obvious that, at a given point, the imposition of additional burdens in the shape of more expensive service and lower rates in favor of the public will simply result in the suspension of operations by the corporation. Quite apart from considerations of fairness to the holders of corporate securities, the imposition of too burdensome conditions would, if carried to extremes, defeat its very purpose by making it impossible for the corporation to continue its business, there being obviously no way of compelling a corporation to continue its business at a loss.

With regard to existing corporations, such extremities are more or less prevented by the constitutional safeguards of the "due process" and "impairment of the obligation of a contract" clauses. But, with regard to future grants of franchises, where the power of the franchise-granting authority is not circumscribed in this way, these practical considerations come into play. A policy of securing the interests of the public without any regard to the fair demands of the corporations will again de-

feat its own purpose, in that capital will not be attracted to undertakings of such a doubtful nature. As a result, the city and its citizens will suffer by being deprived of a convenience, amounting almost to a necessity. The shortsightedness of such a policy is apparent, and yet many enthusiastic champions of the public against the corporations seem to proceed on the theory that any and all conditions in favor of the public are fair and desirable and that the corporations can and will shoulder all such conditions without limit. If public utility undertakings are allowed to pay a reasonable return to investors they will always attract sufficient capital, for they represent an unusually safe investment under normal conditions, owing to the fact that they are necessities for the public and are protected against unfair and ruinous competition. But if a reasonable return is made impossible or even improbable, owing to the high standard of service required and the low rates insisted upon, then private capital will simply turn to other channels, and the public, instead of being well served, will not be served at all, unless the city itself undertakes the establishment and operation of all these services, a possibility which will be discussed somewhat later.

The most satisfactory kind of regulation being that which can be established through the franchise conditions themselves, this method will first be considered. The question therefore arises as to what should be the terms of a public utility franchise which will insure proper protection both to the public and to the investors. First in importance, perhaps, is the determination of the length of time for which such franchises shall run. Earlier franchises, as has been seen, were sometimes granted by legislatures in perpetuity. Though such franchise grants were virtually a treasonable betrayal of the

property of the public by their temporarily chosen representatives into the hands of the corporations and should have been declared contrary to all public policy and void, the courts upheld such grants and protected the grantees in their dangerous and harmful position. The obvious folly of permitting special rights in public property to be granted away for all time subsequently led to the prohibition, in many constitutions, of perpetual franchises, though there are still instances of such franchises being exercised. The best method of dealing with this consequence of former folly will be considered in connection with the problem of controlling existing corporations, but there is today no difference of opinion on the utter indefensibility of perpetual franchises.

Where franchises were not granted in perpetuity they were generally fixed for a definite period of years, not infrequently for such long terms as fifty or a hundred years and sometimes for so long a term as to be practically grants in perpetuity. Excessively long-term periods are objectionable in the same way, though to a lesser degree, as are perpetual franchises. Fifty years is so long a period, especially in view of the rapid development in all the processes involved in the operation of public utilities, that conditions that may have represented the best that was known at the time the franchise was granted may at the end of a fifty-year period be so obsolete or inadequate as to be almost useless under the new conditions.

From the point of view of the public, therefore, the theoretically perfect franchise would run from year to year only, with the possibility of revising its terms at the end of each twelve months. It is obvious, however, that no undertaking requiring the investment of capital could be financed under such terms at all. It would be

necessary to lengthen the period much beyond that point before there would be any appeal to private capital. The longer the franchise period the more attractive the proposition to capital, showing that the interests of the public are in danger both from too short and too long a franchise period. Experience seems to show that for most undertakings a twenty-year term is sufficient to prove attractive without being too long from the point of view of desirable changes. Different kinds of utilities present somewhat different conditions in this regard, depending on such factors as the ratio between cost of construction and operating expenses, elements of depreciation, availability of plant for other uses at the end of the franchise term, etc. But it is generally agreed that a franchise should not run for more than twenty-five years, or thirty years at the outside, if the public is to be adequately protected.

The definite term franchise has, however, an inherent defect, apart from the dangers of too long and too short periods. Whatever the term of the franchise may be, its expiration will be certain to come sooner or later. When that expiration comes sufficiently near so that the utility can run along until the end of that time without making allowance for repairs, additions, and improvements, it is obvious that there will be a strong temptation for the corporation to save that amount of money instead of putting it into a plant which, unless there is some guarantee of the franchise being renewed, will in a few years be comparatively worthless. The public, therefore, is again the loser in the poor quality of the service it obtains toward the end of a definite franchise term.

In order to meet this objection to the definite term, as well as to insure to the city a more continuing character of control, the indeterminate franchise has come into use.

Under this kind of a franchise the corporation is granted the right to use the streets for its purposes without any definite time being stated. But this form differs radically from the perpetual franchise in that there is reserved to the city the right to terminate the franchise by taking over, at the end of any one of a sequence of definitely stated periods, the business of the corporation at a fair value. For instance, the franchise may state that at the end of the first ten years, and every five years thereafter, the city may terminate the franchise by purchasing at a fair price the equipment of the corporation. In this way the stockholders of the corporation are assured of an investment for at least ten years, with the alternative thereafter of either receiving a fair price for their stock, which is, of course, not the case where a definite term franchise expires and is not renewed, or of having the investment continue as it stands for another five years. Both the city and the corporation are therefore protected under such an agreement, provided—and there lies the main difficulty and danger—some satisfactory scheme is secured for determining the price at which the city shall purchase the property of the corporation. The various elements that enter into a fair valuation of the property of such a corporation have already been briefly considered above, but as they are matters that must be carefully determined in the conditions of the franchise grant itself, they will be enumerated again in pointing out those conditions here. Suffice it to say, at this place, that an impartial tribunal of experts should be provided to make a valuation of the corporate property along the lines laid down in the franchise grant.

Next to the matter of the term of the franchise comes the question of service. It is highly desirable that the franchise contain very detailed provisions as to the service

requirements. As has been suggested before, the emphasis as regards the matter of service will not be placed on the same points in the different services, but clear and precise requirements as to service for each kind of utility should constitute an important part of the franchise grant. Equally important, however, with the matter of initial requirements as to service should be the continuing power of the city to change those requirements to meet new inventions and developments and other changed conditions at any time within the period of the franchise. If it be kept in mind that increases in capital outlay or in operating expenses for such improvements in service will, under a fair system of rate regulation, be reflected in increased rates, there is no hardship in holding the corporation up to the highest standard of service desired by the public. All such matters as improved devices, extensions of service, etc., will then be settled solely on the question of whether such an improvement involving additional expense is worth enough to the public to stand an increase in the price of service.

Next to service, and most intimately connected with it from every point of view, is the question of rates. If, as stated above, the rates that a public utility should be allowed to charge are such as will yield a reasonable net profit on the money fairly invested, under the conditions of service required, the determination of the value of the undertaking becomes of the utmost importance for this purpose, as well as for the purpose of determining what price the city shall pay for the plant of a private corporation which it may for any reason wish to take over under power reserved in the franchise. The franchise itself should, therefore, stipulate the elements that may properly be considered as part of the capital of the corporation, and should prescribe under what conditions

shares of stock shall be issued and for what purposes and in what amounts money may be borrowed by the issue of bonds. For such purpose it is, of course, necessary that the city, or whatever public authority is going to look after the enforcement of the franchise conditions, be continuously informed about all financial transactions of the corporation. In the same way the proper financial management of the corporation from the point of view of the retirement of its obligations, maintenance, repair and improvement funds, etc., becomes of great importance, and the franchise should lay down the financial principles which the corporation must observe. For this purpose it is necessary that the corporations keep the records of their financial transactions in a manner prescribed by the regulating authority.

One rather controverted subject connected with the matter of rates, is the question of financial returns to the city from the corporation. There is, of course, no reason why the physical property of the corporation should not pay taxes into the city treasury just like any other persons or corporation, for that element of expense is legitimately figured in the operating expenses of the company. But it is a not uncommon practice to assess a charge against the company for its franchise. The common attitude of the public is that, as the company enjoys special rights in the city's streets which belong to the public, it should pay back to the public, in the shape of special taxes, financial returns. Of course, such a franchise tax amounts merely to another item of expense which will be reflected in higher rates. The question, therefore, resolves itself into this: shall the users of the utilities, who pay the same prices for service without any regard to their financial ability, be burdened by paying a special tax, the proceeds of which would otherwise be

made up by general taxes, which are theoretically, at least, distributed according to ability to pay? This is a very fundamental question of policy which arises in a more acute form in connection with the question of rates, when the public utility is owned and operated by the city, and will be considered more fully there.

The franchise must determine the rates that may be charged on the basis of the legitimate capital invested, and the legitimate operating expenses under stipulated conditions of service. Since operating expenses are subject to considerable variations, owing to fluctuations in the cost of material and of labor, and especially since standards of service should be readily flexible in the interest of introducing improvements, it follows that the rates determined in the franchise should be subject to variation at relatively frequent intervals. Always, with the fundamental requirement of reasonable returns in view, the city should have the power to raise or lower the rates of service of the corporation in keeping with the variations in the factors noted above. To encourage administrative efficiency in the management of the corporation, the city might, with profit, permit the corporation to earn a somewhat higher profit if it can reduce the rates without diminishing the quality of the service rendered.

Aside from the fundamental questions of rates and service, there are still other considerations that ought to find a place in a modern franchise, according to a fairly widespread and increasingly prevalent opinion. Not only should the city be interested in protecting that portion of the public which uses the utilities, by insisting on good service and cheap rates, but it should also be concerned with that considerable portion of its public which is used by the corporation, that is the body of em-

ployees. If the city is an employer of labor, it is generally conceded that it should provide for its employees those conditions of hours of labor and wages which an awakened public conscience recognizes as the minima of decent existence. The city cannot, it is true, influence these conditions of employment very greatly in the case of private employments, but why should it not use its power of imposing franchise conditions upon public utilities to insist that there, also, modern conceptions of the rights of labor be put into effect? The conclusion would seem to be inevitable that the city should do all in its power to aid in the cause of social amelioration, since it is its own population which is suffering from the undesirable conditions. There are today many persons who are loud in their demand for using the franchise-granting power for this purpose.

What is equally inevitable, but not so generally appreciated by those who are clamoring most loudly for that means of improving the condition of the laboring classes, is that shorter hours of labor and larger pay mean increased operating expenses, which must be met by the consuming public in higher rates. In their laudable desire to impose a humanitarian duty upon a soulless corporation, these enthusiasts sometimes forget that a good part of the public which has to bear increased prices in public utility service as a result of such measures, itself belongs in the laboring class, and bears an unduly burdensome share of the cost of operation because public utility service is paid for at the same rate by all alike, not according to financial ability to pay.

One other concern must be kept in mind in framing a public utility franchise grant. Since the real point of contact between the public utility and the public occurs through the special rights in the streets accorded to the

former by the latter, it is very important that those public rights in the streets be also safeguarded. Justice and expediency demand that the use made of the public streets by the public service corporations should interfere as little as possible with the ordinary use of the streets by the public in general. The tearing up of streets for water mains, sewers, gas pipes, etc., always involves a serious interference with the use of the streets for traffic purposes. It is desirable, therefore, that such tearing up occur as seldom as possible and with as little interruption of traffic as possible. The laying of such pipes in alleys instead of streets is much more advantageous from the point of view of the public and should be required even if it is somewhat more inconvenient or expensive to the corporation in certain cases. As far as possible, everything that has to be done below the surface of the street should be done at one time, before paving has been laid or when it is being repaired. These various utilities should, for the same reason, be required to use one tunnel whenever practicable, convenient entrance to which can be had from openings in the street without tearing up the surface. Coöperation between the utilities in such matters must be imposed by the franchise conditions if it is to be adequately insured. In the same way, the underground laying of telephone and electric-current wires, both for lighting and for the street railways, is demanded by considerations of public safety and of city beautification and should be inserted in the franchise requirements. Traffic experts are not agreed as to the relative advantages of permanent tracks and trackless means of transportation in the city streets, but the city should secure for itself the right to insist that whichever plan of street transportation proves to be the best shall be put into effect by the corporation. In other

words, the city must insure to itself a continuing right over its own streets, the convenience of the public utility corporation being secondary to that of the public at large, always remembering, of course, that any change demanded by the city which involves greater expenses, either in construction or operation, will have to be reflected in increased charges to the consuming public.

So far, there has been considered the relatively simple case of a corporation desiring a franchise right in the streets and being therefore compelled to accept the terms the city considers proper to impose, or else to give up its proposed undertaking. This is coming to be more and more the normal case, fortunately for the progress of public regulation. New utilities are being developed and old franchises are expiring each year. At any given time, however, the majority of utilities are operating under existing franchises, running for a greater or less number of years, and all these franchises, even most of the very recent ones, were granted without full understanding of, or attention to, the considerations of public protection enumerated above. The real practical difficulty of regulation today exists, therefore, with regard to corporations doing business under an existing franchise. It has already been pointed out that the courts have protected charters and franchises, as contracts, and that in many cases the corruption or folly of former grants has saddled the public with an incubus that cannot be wholly thrown off until the franchise term expires. But even such cases, though most unfortunate, are not altogether hopeless, and some measures of redress and protection exist in nearly all cases, if the city is energetic enough to employ them. At common law, as has been seen, there is an implied obligation on the part of public service

companies to render reasonable service at reasonable rates. The public authorities may, therefore, pass regulations with regard to service and rates up to the point that the courts will uphold them as reasonable, which are valid, even though the original franchise grant said nothing about rates or service. Furthermore, the police power of the government, whether state or city, as the case may be, that is, the power to regulate all undertakings in the interests of public safety, health and morals, is exercisable with regard to public service corporations without regard to franchise grants, as it is a theory of our constitutional law that no governmental authority can legally and effectively grant away its police power. At the same time, while the general police power and the special power to insist upon reasonable rates and service on the part of the public utilities give the city, in many cases, a basis for improving conditions very materially in the matter of the relations and attitude of the corporations to the public, it must not be forgotten that regulation cannot be nearly so effective and comprehensive where the city's hands have been tied, in this way, by contractual obligations.

It is, therefore, little short of criminal to renew an existing franchise or to grant a new one and to rely upon this general, indefinite, and unsatisfactory method of control instead of putting the necessary provisions in clear and unmistakable language into the franchise. All questions as to the fair capital value of the plant, which, as has been said again and again, are at the basis of all rate regulation, on which there is a possible and actual difference of opinion, can be settled beyond peradventure of a doubt in a new franchise grant in favor of the public, while past investments are more likely to be looked at by the courts, who are the final arbiters in cases of con-

flict, from the point of view of the vested interests than from the point of view of the public.

Whether the regulation of public utilities is to occur by means of properly worded franchises in future grants or under the general principle of law applicable to public utility corporations, it must be clearly understood that the actual work of regulation involves continuous investigation and supervision of a most exacting kind. The task of drawing up a model franchise for acceptance by a corporation is but the initial step in regulation, and the easiest one. The task of seeing that the conditions of the franchise are lived up to and that justice is done both to the corporation and to the public is extremely difficult and requires technical and administrative skill of the highest order. The function of regulating public utilities is, therefore, quite as much an administrative as a legislative function, indeed more so. On its face it would seem to be clearly a municipal function, since it is the use of the city's streets that is involved, and the rights and interests of the municipal citizenship that are in need of protection. There are some very important considerations, however, which seem to point to the need of state regulation and have led, in the United States, to establishment of state administrative authorities with a greater or less amount of control over municipal public utilities as well as over state-wide utilities, such as railroads. Indeed, this question of state *versus* municipal control of such utilities has become one of the most controverted of all the questions connected with public utility regulation. A brief presentation of the points involved will therefore not be out of place at this point.

To begin with, it may be said that *prima facie* the control of municipal utilities, that is, utilities serving the inhabitants of a city and the city itself, is a matter for

the municipality, for the reasons mentioned above. The power to grant franchises and the power to control utilities already operating under franchises would seem, therefore, to be one which, under general conceptions of home rule or the right of local self-government, should be vested in the city. Indeed, it was the disregard of local interests and the corruption in connection with the granting of franchises in the streets of the city by the state legislature that led to the introduction of provisions in the state constitutions prohibiting the legislature from making such grants. To return to a system of state franchises for local corporations would seem to involve a return to a system which has been tried and found wanting. It must be remembered, however, that the disregard of the rights of the municipal public by the legislature dates back to times when a conception of the real rights and interests of the public in the management of public utilities had not yet become general, and that ignorance and indifference played a part in those early developments as well as corruption. This is evidenced by the fact that the cities themselves, when they acquired the right of granting franchises, were just as indifferent to the interests of the public as were the state authorities that had formerly made the grants. Even corruption was as rife under the system of municipal grants as under that of state grants, and many of the most shameful franchise scandals were perpetrated by city councils, the local franchise granting bodies that were looked to to preserve the interests of the public. It seemed to make little difference, for many years at any rate, as far as the public was concerned, who granted the public utility franchises; the public suffered in either case.

With the gradual awakening, however, of the public realization of their interest in the control of public util-

ities, the question is no longer one of which system is likely to be most injurious to the public, but which system presents the likelihood of more effective regulation, assuming that both are managed in the interests of the public. It is true that the era of corruption is by no means altogether past, and that to many people the principal factor in this controversy seems to be that of minimizing the possibility of wrongdoing and corruption, a point of view that is an historical heritage of our whole conception of government as a system of checks and balances. If the main point of view to be kept in mind is the relative likelihood of corruption by state authorities as compared with local authorities, the question seems incapable of any definite answer. Some people are of the opinion that if the state legislature grants the franchises and a state commission is charged with the administration of the regulations, the pernicious influence of the public utility corporations can more effectively unite against the public interest than if a fight has to be made in every municipality separately in order to control the public servants in the interests of the corporations. On the other hand, it is claimed that the power of resistance and the check of publicity are much greater in the case of state authorities backed by the enlightened electorate of a whole state, and that public utilities prefer to deal with the cities individually as being easier prey. Theorists stand on both sides of this question, and experience can be adduced as evidence for either view. In many instances, no doubt, where cities are hopelessly controlled by corrupt utility rings and the state government is on a higher plane of policies, the interests of the citizens in such matters as these would be better preserved by state authorities than by local authorities. On the other hand, instances are not lacking where progressive cities have

made advances in this regard which would never have been possible under an inefficient and more or less corrupt state government.

If the question of corruption alone were involved, it would seem clear that the best argument would still rest with the advocates of local regulation. When there is great likelihood of franchises being corruptly granted and the grantees corruptly supervised, it would seem better that the citizens of each city should suffer from local corruption which they have the political power of destroying, if they really desire it, than to subject them to corruption by state authorities over whom they have virtually no political control. The possibility, at least, of stamping out corruption with regard to a particular city rests, then, with the persons most vitally affected. The argument that the united efforts of municipal citizens, through their representatives in the state government, would prove more effective for the safeguarding of public rights throughout the cities of the state if exerted upon the state authorities as regulators of public utilities, loses much of its force when it is remembered that in many of our states the city dwellers are greatly in the minority and depend for effective influence upon ignorant and indifferent representatives of rural districts, where local utilities do not exist and therefore present no governmental problems.

If the balance of argument seems to favor local regulation, from the point of view of political control and the elimination of corruption, this is not true from the point of view of expert or skilled regulation. As has been emphasized above, both the original determination and also the administration of the regulations imposed upon public utilities require the employment of a high degree of legal, engineering, and financial skill if the regu-

lation is to be both fair and effective. Such technical skill is, however, very expensive, and, in the case of the smaller class of cities, at any rate, is frequently quite beyond their financial powers. The corporations can and do always employ the most competent experts they can get, for they prove to be the cheapest in the long run, at almost any price, at least at prices beyond the capacity of small cities to pay. The result is that the interests of the public are represented by amateurs, while those of the corporations are represented by experts. Whether these interests are weighed, therefore, by city councils, by public utility commissioners, or by the courts, the public is distinctly at a disadvantage, and, naturally, usually gets the small end of the deal. It is only in the case of the largest class of cities, therefore, that local regulation, either in the granting of franchises or in the enforcement of their terms, is likely to prove scientific and efficient. A state board, on the other hand, can easily be provided with the best experts available, though it must be said that it is not usually the case even there, owing to the small salaries which Americans appear to be willing to pay for public service, no matter how important or even economical in the long run. "The long run" does not, as a rule, appeal greatly to the average American citizen, in these or in other matters.

There is another consideration in favor of state regulation over local regulation. With the increasing density of population, the closer proximity of cities, the tendency toward consolidation in the management of public utilities, and the technical and engineering improvements that are continually extending the effective radius of service of public utilities, the purely local utility is being replaced by interurban utilities of all kinds. Street railways run from one city into another, passing through

dozens of different municipalities in one continuous run. Gas companies pipe their products into and through a great many cities, while waterworks, electric-light, and telephone companies find it advantageous to serve more than one community. Obviously, in such cases, the undertaking should be regulated, not by the dozen or the score of municipalities served, but by a single authority. To subject the corporation to the individual eccentricities of local utility experts, in so many municipalities, would make the undertaking almost impossible, and yet considations of large economy point to the development of such interurban utilities as the desirable line of progress. Fair and effective regulation in such cases is almost out of the question if each city is empowered to take action. The other alternative seems to be state regulation for all such cases as this. There is indeed another possibility, and that is the creation of a special governmental authority whose jurisdiction shall be coextensive with the territory to be served by the utility, giving each municipality interested a representation in this new governing authority. A plan of this kind has frequently been put into effect in European countries, and, to some extent, in the United States also, for the joint management of interurban utilities to be owned and operated by the public; but, as a mere instrument of government supervision, it seems to be impracticable owing to the multiplication of jurisdictions, one being required for practically every separate kind of utility, and the continual extension of the field of operation of these utilities. State regulation seems to be the only alternative, therefore, in the case of distinctly interurban utilities.

For interurban utilities and for local utilities in the smaller cities, the establishment of state commissions to regulate the matter of service and rates seems to be de-

sirable from the point of view of effectiveness of control. For the cities that are large enough to be able to pay for expert regulation, the original argument in favor of home rule seems to prevail. Just when a city becomes able to protect itself adequately is not, however, a matter that can be definitely determined. To a large extent municipal expenditures are determined upon the question of relative importance, since no city has money enough to do all that might prove desirable if the question of expenditure could be ignored. Therefore, in some cities the proper regulation of public utilities locally might be considered sufficiently important to warrant the expenditure of money which in another larger city is spent on parks and boulevards. The only reasonable solution of the question would seem to be to take the minimum population below which it is apparent that no city can or will employ sufficiently expert public utility commissioners and to provide for state regulation of their public utilities. Such a minimum could certainly be safely set at twenty-five thousand inhabitants without danger of interfering with local initiative and progressiveness. From that point on up there will be a number of larger cities which may or may not be or feel able to handle the public utility situation. These should be permitted to decide for themselves whether they wish to have the benefits of state regulation, with its possible drawbacks, or whether they wish to handle the matter themselves. Above a certain point, say two hundred and fifty thousand population, the question may properly be regarded as so largely a local one that state regulation is undesirable, and both the privilege and the obligation of handling the public utility problem should be imposed upon the municipality, with only such legal limitations as may appear necessary in the interests of saving a power of interven-

tion on the part of the state in case matters become hopelessly bad and the local electorate or authorities appeal to the state for help. Quite consistent with the principle of local regulation is a very desirable requirement that, even in cities having their own public utility commissions, the full records of the corporations and of the dealings of the city with the corporations be filed with the state authorities for purposes of information and ultimate supervision.

In cities where, as is normally still the case, the franchise-granting power is in the hands of the local authorities, it seems desirable that the local electorate have a right of voting on proposed franchise grants, at least in all cases where important concessions are made in the public streets. Since franchise grants are legally contracts, the public is left without remedy if the city authorities are careless in granting away valuable rights. The ordinary weapon of the elector as regards laws and ordinances, viz., the retirement of the representatives responsible for the passage of the laws and the election of others who will repeal the undesirable legislation, is manifestly useless in the case of contract rights once granted away. It seems only proper, therefore, that no such action shall become effective until formally approved by the electorate as well as by the authorities. It is true that the public generally is likely to approve such proposals without much consideration, but the obligatory referendum at least throws the responsibility clearly on those who will suffer from carelessness in this regard.

CHAPTER X

MUNICIPAL OWNERSHIP [1]

The criminal record of many public service corporations in the past, from the point of view of sacrificing all interests of the public to their own interests, the difficulty of getting legislatures or councils to attack the problem of public utility regulation with the necessary intelligence and energy, and the inherent and continuing difficulties involved in proper regulation, as indicated in the previous pages, have all combined to suggest an heroic remedy for this vexatious problem, a remedy which has been continually growing in favor. Since public utilities are businesses so affected with a public interest as to require very careful regulation and minute supervision, and since the financial interests of the corporations seem to be inherently antagonistic to the interests of the public, the suggestion naturally arises that the public itself, that is, in the case under discussion, the city, should own and operate these public utilities. Thus is raised the cry for municipal ownership and operation of public utilities, which is today one of the most agitated questions of municipal policies, not only in American cities, but in European ones as well. The natural appeal to municipal own-

[1] This subject is also treated at length in King: The Regulation of Municipal Utilities, 1912, D. Appleton and Company, Publishers, New York.—EDITOR.

ership as the easiest way out of the difficulties involved in public utility regulation, though perhaps the most general and popular argument in favor of municipal ownership and operation in this country today, is not the only consideration that prompts many students of municipal administration to turn to that program. It may be worth while, therefore, to consider briefly some of the main points advanced in favor of municipal ownership and operation, and to see, if possible, what are the chief objections to the movement.

In the first place, it may be claimed that most of the serious evils resulting from private ownership will disappear, since there will be no incentive on the part of the city to continue them, the city being in a position to emphasize service rather than financial gain. For instance, stock watering, one of the most difficult of the abuses to control in the case of privately owned corporations, is no longer of financial benefit to anyone. Moreover, increases in the value of the land, the plant, or the business of the undertaking accrue automatically to the city, either to the utility users or to the general taxpayers, depending on the financial policy to be followed. Thirdly, the political corruption which has, in this country, at least, always associated itself with the dealings of the public utility corporations and the representatives of the public would be eliminated, and one grievous political sore be given an opportunity to heal up. This is one of the arguments which is most strenuously insisted upon by those advocates who see in municipal ownership of public utilities one of the most essential steps in the direction of purifying city politics, and who set that consideration above even questions of service and rates.

There seems to be no doubt that, so far as the illegal practices of public service corporations are concerned, and

investigation has proved beyond a possibility of doubt that in numerous cases their activities have been in a great measure both anti-social and illegal, the possibility of their complete elimination by municipal ownership and operation presents incalculable advantages over difficult regulation. There are, moreover, aspects of the problem which show that even the perfectly legitimate operations of private corporations are much less favorable to the public than is the position which could be assumed by the municipality owning and operating the same utility. The primary object of a public service corporation is obviously that of money returns on a financial investment. Unless a reasonable financial profit is permitted to be earned, there will be no capital invested in that sort of undertaking. Existing corporations will go into dissolution and no new undertakings will be promoted. Both quality of service and rates charged are, of course, affected by the requirement of reasonable profits on capital invested, if the utility is privately owned and operated. If the city owns and operates the utility, on the other hand, the element of financial profit can, if desired, be entirely ignored. The reasonable profit which must be earned by the private corporation can, in the case of the city, be turned into better service or reduced rates, or both, without making the operation of the utility a charge upon the finances of the city. On the other hand, it must be noted that some enthusiastic supporters of municipal ownership emphasize the advantages of having these profits accrue to the benefit of the public treasury, and welcome the change as one means of aiding in the big problem of securing the necessary revenues for the city. Obviously, both of the last-named advantages cannot be realized concurrently, and it will be necessary to inquire a little later into the questions of policy involved in this matter.

It is also claimed that, owing to the superior borrowing power of cities as compared with private corporations, the rate of interest that cities have to pay being lower, their utilities profit by lower overhead charges, which can be turned into profits or applied in improving service or lowering charges.

To offset these claims in favor of municipal ownership, the opponents of this development point, in the United States, to the acknowledged inefficiency and even corruption of American city government. To impose upon governmental agencies, which have proven so incapable of handling properly the duties already assigned them, a task so difficult and complex as the successful operation of large utility plants, is simply to invite the utter breakdown of the weak machinery and to plunge our cities into financial ruin. There can be no answer, unfortunately, to the charge that our cities have, as a rule, been so full of inefficiency and even corruption that they seem unsafe instruments for performing difficult tasks of administration. At the same time, it must be repeated here that the regulation of public utilities, outlined above, requires a high degree of legal, engineering and financial skill to be done successfully. Either the city is capable of employing that kind of skill and of having the work of regulation done effectively, in which case the work of actual administration would require no very great additional administrative capacities, or the city must surrender and acknowledge that it is wholly incapable of dealing with the public utility situation. But this second alternative is one that even the ardent opponents of municipal ownership are not willing to admit, for they all recognize the propriety, desirability, and necessity as well as the possibility of such regulation. Advocates of state regulation of all public utilities can, it is true, consistently claim

that American cities are incapable of either efficient management or of regulation, but many, if not most of the municipal ownership opponents, would be unwilling to surrender the principle of home rule to the extent of turning over the whole utility question to the state government. The objection to municipal ownership based on the inefficiency of municipal government in this country is, therefore, hardly a conclusive one, though it makes a strong appeal.

A more serious objection, perhaps, is encountered in the fear that the municipalization of public utilities requiring the services of great numbers of men will introduce a political danger of no mean magnitude. If the laborers and other employees that work on public utilities get on the city payroll, it is feared that the political pressure brought to bear on them, not only in favor of the shortest possible hours of labor and the largest possible wages, but also in favor of lax discipline and general inefficiency, will be too strong to be resisted successfully and will demoralize the service. The voting strength of the employees of waterworks, light plants, street railways, and telephone companies will in any city constitute a very considerable part of the total and, in many cases, hold the balance of power. Whatever the political opinions of these men may be, it is natural to suppose that their chief concern will center about the matter of the conditions of their labor. If their influence were to be exercised only in the direction of improving conditions up to a reasonable point, such influence could but be accounted beneficial; but the same political strength which would enable them to bring conditions up to a reasonable standard would enable them to insist on unreasonable and ruinous conditions, and there is no way of limiting that political influence to its legitimate use.

There seems to be no question that a body of municipal employees, organized for that political purpose, exercises a much more powerful and direct influence than would the same body of workingmen also politically organized for the purpose of improving working conditions but employed by private corporations. The reason for this is simply that, in the case of men employed by private corporations, the self-interest of the corporations will always prompt them to fight the demands of the employees, whereas, if the same men are employed by the city, the only effective check upon their demands must be exercised by men who may lose their positions if they defend a general public interest against the specific demands of the organized employees. In other words, the power of improving the conditions of work of municipal employees lies immediately and directly in the hands of elected officials, while privately employed workers must appeal to officials who have but a limited and largely indirect power of influencing their conditions of work.

This danger is a real one and not merely a theoretical one, as the experience of democracies in which government ownership is widely applied has shown. As a remedy for this condition, the plan has been proposed of disfranchising the municipal employees in local elections, in order to prevent them from exercising a pernicious influence in politics. It is not possible to go into the merits of this proposal here, except to point out that it is extremely unlikely that the plan would meet with the approval of the American electorate. This danger, then, remains and must be faced. It is, of course, true that the answer may justly be made that the pernicious influence of employees working to get all they can out of the city for as little returns as possible, could not in any case be any worse than has been the pernicious influence of

public utility corporations in the past trying to accomplish the same thing. Yet the day seems to be coming, when the selfish demands of the corporations can be modified in the interests of the public, while no satisfactory suggestion has yet been made for meeting the new political danger that would come from having a very large number of voters on the city payroll. In view of the general experience of cities in democracies, both here and elsewhere, that they pay more and get less service than do private corporations with the employees they already have, it seems fairly certain that the increase of municipal employees to the point of constituting a strong and well-organized section of the electorate, with immediate common purposes of more importance than any general questions of political opinion, would mean even more unsatisfactory conditions.

If we turn from theoretical contentions to practical experience, the matter is still further confused rather than cleared up. Some very careful and exhaustive studies of this side of the subject have been made in recent years, notably that of the Commission on Public Ownership of the National Civic Federation in 1907. This investigation proved that comparisons as to efficiency of management, and even as to rates and service, are extremely difficult to make, and that no general conclusions for or against municipal ownership and operation are inevitably to be drawn from even careful investigation. Consequently, the whole matter is largely left to the relative appeal of theoretical contentions.

It has already been seen in other connections, that all public utilities are not to be treated alike in considering this question. The general arguments for and against municipal ownership must make way, and are making way, for more specific considerations in the case of certain

utilities. Such, for instance, are public waterworks. The propriety of municipal ownership and operation of waterworks is generally conceded, even by opponents of the general principle of municipal ownership, on the ground that the public health is so intimately connected with the water supply, to say nothing of the safety of the city against fire, that even wasteful and expensive municipal operation, which can at least safeguard the public health, would be better than private operation involving that lack of immediate control which may be essential to prevent widespread sickness and death. Waterworks are therefore the most widely municipally owned utilities in this country, and, curiously enough, seem to be the best managed from a business point of view as well. This may, no doubt, be due to the fact that there are no great technical difficulties in waterworks' administration, as compared, for instance, with the manufacture and distribution of gas, or the management of street railways. Furthermore, as a means of getting services which private capital will not supply, such as good theaters at low rates, or businesses which present unusual difficulties of police control, like pawnshops, municipal ownership is a logical necessity, and has been introduced extensively in European cities.

But the municipal ownership movement has made great progress in European cities in other directions also, especially along the lines of street railways, one of the utilities which has so far been municipalized in but a few American cities. The movement for municipal ownership is steadily progressing in the United States as well, though American cities have not, in general, been granted the same freedom in this matter that has been accorded to European cities. As a means of insuring good service, low rates, and profits to the city treasury, no one need

look to municipal ownership as a certain cure-all. The actual decision in a particular city as to whether a change shall be made from private to public ownership will be decided, it is true, largely by the general convictions on the subject of the majority of the citizens, but these convictions will be powerfully influenced by local conditions. If the private corporations have consistently furnished poor service and charged high rates, and if the legal powers of the city or the conditions of the franchise prevent the enforcement of adequate regulation, the demand for municipal ownership will suddenly become overwhelming, and theoretical objections to municipalization will be thrown aside without much ado. This will be especially the case if the municipal authorities have shown themselves champions of the public interests so far as their powers went. If, on the other hand, the service is good and the rates are low and there is no charge of meddling in politics by the corporation, the advocates of municipal ownership are likely to find little enthusiasm, though even abstract devotion to the principle of municipal ownership is spreading rapidly. The corporations themselves can therefore pretty generally determine the attitude of the public. If they furnish good service and are content with reasonable profits, the demagogues who denounce all corporations without discrimination as robbers, and who appeal to the prejudices of the voter to raise a popular political platform on which they may stand, will find a relatively small following. If they cling to the attitude of "the public be damned," they will find that general arguments against municipal ownership avail them little. In other words, the chief appeal of municipal ownership in this country today is still as a means of relief from intolerable corporate abuse which cannot be escaped in any other manner. As a sword of

Damocles suspended over the heads of uncontrollable corporations, the possibility of municipal ownership is a most valuable champion of public rights, and all legal and financial difficulties under which American cities commonly labor, in making this threat effective, should be removed.

The difficulties which must be removed in order to enable cities to make use of the specter of municipal ownership to help keep short-sighted corporations under control are manifold. In the first place, cities have not in all cases been given power to own and operate all public utilities. In cases where corporations are operating under long-term franchises which are so drawn as to deprive the city of effective control, the erection of a plant by the city and the elimination of the corporation by competition is sometimes the only solution of the problem. The same situation arises in case the conditions under which the city can buy the plant of the corporation include watered values and franchise values, neither of which the city should be compelled to assume. Otherwise, the more economical plan is to purchase the existing plant at a fair price when the franchise expires or one of the purchase periods in an indeterminate franchise has arrived.

But the mere legal power to buy the plant of public service corporations, even at a fair price, is valueless if financial restrictions stand in the way. Expensive utility plants cannot and should not be constructed or purchased without the borrowing of money by the issuance of bonds. The borrowing power of American cities being generally definitely limited, as will be seen in a later chapter, and that limit being usually reached or nearly so by the bond issues required for other public improvements, it is frequently impossible for cities to purchase plants, even at

a great bargain or when very necessary for the public good. Obviously, a bond issue for the purpose of acquiring a public utility at a fair price, which can easily be made to pay its own expenses, including interest and sinking fund, is not an additional financial charge against the city and should not be included in the debt limit. If it is shown that the city is paying a reasonable price for a necessary utility, the debt limitation should not apply. All cities should, therefore, be enabled to use effectively the threat of municipal ownership, leaving the determination of the advisability of putting the threat into action to the local sentiment. Since this is, after all, largely a matter of conviction and of public policy involving a continuing and, in a measure, an irretrievable step, it seems eminently a matter that should be determined by a referendum of the electorate, not merely by action of the governing authorities.

If municipal ownership and operation are actually put into effect, there are still some important matters of public policy to be determined upon. Chief among these is the one that was raised earlier in the chapter, namely, the financial policy that is to govern the administration of the utility. At least three or four alternatives present themselves. The utility may be so indispensable and so inevitably connected with the health of the community that the question of returns is wholly unimportant. For instance, to take an example that has already been made use of, pure water for domestic purposes is absolutely necessary, and no one in the city could safely be left without it. If necessary, therefore, every member of the community must be furnished pure water at a price he can pay, even if the waterworks are operated at a loss in consequence. In that case the deficit would have to be borne out of the general funds of the city, and the utility

would actually become a financial charge upon the community. Up to the present, the problem of securing pure water has not involved such difficulties as to interfere with the possibility of furnishing water to every one at reasonable rates and still make a profit out of the plant. Conceivably that development may, however, occur with the increase in the density of population. Such a utility is, therefore, properly regarded as more like the governmental service of the city, like police and fire protection, for instance, which are paid for out of the general funds and not by charges against those making use of them.

A second method of procedure, with regard to rates, would insist upon a return from the utility just sufficient to pay overhead charges and operating expenses but no profits. In that case the utility would be no charge upon the treasury, and the users would be charged only the actual cost of the commodity used. Contrasted with this is the third possible policy, that of charging rates sufficient to yield a reasonable profit over and above operating expense and overhead charges. In this case, the profit accrues to the benefit of the taxpayers generally at the expense of the users of the utility. On the relative merits of these two methods of handling the situation there is considerable difference of opinion and of practice. On the one hand, it is claimed that the city, if it goes into business undertakings, should operate them on a business basis, including legitimate profits. On the other hand, it is asserted that one of the advantages of public ownership over private ownership of these businesses affected with a public interest is that the element of profit can be eliminated and the public served at cost. The contention in favor of including reasonable profits in the charges has the great attraction of aiding in retarding the universally rising general tax rate and finds

favor with the politicians who like to pose on the "reduction of taxes" platform. The elimination of profits has a social appeal which is receiving more and more support. This social appeal is not equally strong in the case of all utilities. But the case of transportation presents it in sufficiently strong form. If the street railways yield a profit to the city on the basis of a five-cent fare, and just pay expenses, all charges included, on the basis of a three-cent fare, two cents a ride represents the profit charge to each person. This amount is paid by the wage earner, at the bottom of the financial scale, and by the millionaire at the top (when he uses the street cars), alike. It means absolutely nothing to the well-to-do, but may mean much to the laborer who has to ride to and from his work, whose children ride to school and whose entire family finds its only recreation in street-car rides on Sunday. The money that accrues to the city treasury from the profits represents, therefore, a very unequal burden on necessities of life. If, on the other hand, profits are eliminated, the burden is greatly decreased for the class least able to bear it, and the difference is paid out of the proceeds of general taxation, which, theoretically at least, bears upon all according to ability to pay. In the case of those utilities which are practically necessities of life, therefore, and which must be paid for by the very poor as well as by the very rich at the same rate, social justice would seem to be clearly in favor of eliminating the profit charges. In the case of such utilities as the telephone, on the other hand, which cannot be regarded as necessities in the home of the very poor, there is not the same argument against profit charges, and the financial advantages would seem to favor the policy of securing reasonable profits.

Finally, there is the policy of charging rates which

will insure not merely reasonable profits but the greatest possible returns to the city exchequer. As applied to the operation of real public utilities, that is, undertakings which serve a real public need, this policy has little to recommend it, for, while it may improve the financial condition of the city, it would limit the use of the public utilities in a way that would not be desirable. To charge what the traffic will bear is a discredited principle in the case of privately owned utilities, and is not much better when practiced by the city, even if the profits flow into the public treasury. The attraction in operating undertakings merely because it is believed that they will prove financially profitable for the city may prove a very dangerous lure. That phase of municipal owership which borders closely on speculation has not been considered in this discussion at all, for, while there are some enthusiasts who believe cities should make money in any way they can, the sober judgment of students of governmental affairs will never approve such a doubtful policy.

One other consideration must be kept in mind with regard to municipal ownership, when actually introduced. No matter which policy of charges is adopted, it is absolutely essential to the satisfactory management of the undertaking that accurate and scientific accounting be practiced. The loose methods of accounting employed by most American cities in all of their financial activities will do more toward discrediting the financial administration of public utilities than any other one consideration, and this makes it necessary to point out the superlative importance of instituting scientific accounting methods before the ownership and operation of new utilities are undertaken.

CHAPTER XI

MUNICIPAL FINANCES—REVENUES

In the preceding chapters the attempt has been made to outline, in a very brief and simple way, the activities which the modern city is called upon to perform. The needs of the city dweller and the obligations of the city government have been set forth in a broad way from the point of view of what should be done. Quite as important from the practical point of view, indeed, absolutely prerequisite to the carrying out of any such program, either in whole or in part, is the question of how the city gets the money necessary to carry on these undertakings. A great deal of money is needed to carry on even a small part of these activities, and each additional activity involves the need of increased financial resources. What the financial resources of cities commonly are and how they can be increased becomes, therefore, a foundation-stone for the building of a municipal program.

Speaking broadly, there are three principal sources of municipal revenue—taxation, income from municipal property and undertakings, and subventions from the central government. In American cities, taxation yields by far the largest part of the revenues of the city, while in European countries, particularly in Germany, cities de-

rive a proportionately greater share from municipal undertakings and from subventions. Taxation, the most important source of municipal income everywhere, is of various kinds. In Germany, the chief category of local direct taxes are income taxes, and in England the direct local taxes are rates based on the rental value of property, while in the United States the general property tax is by far the most important kind of direct tax. The general property tax as employed in all American cities, being the chief source of municipal revenue in this country, requires some consideration. It is an ad valorem tax supposed to be assessed on all property, real and personal alike, according to value. In fact, constitutional and legal provisions almost uniformly require, in our states, that no distinction be made between various kinds of property in assessing and levying the general property tax.

Perhaps no better example can be found of an antiquated and unfair governmental practice in our American system than the continuation of this general property tax. A hundred years ago, economic conditions were such that a tax imposed upon persons on the basis of the value of their real and personal property was a fairly accurate approach to the ideal of taxing every one according to his financial ability to contribute, provided the assessing process was fairly and impartially carried out. Even then, the general property tax was open to some of the serious objections that are now urged against it, but, generally speaking, it was not the instrument of injustice which it has since turned out to be. The development which has made the general property tax unsound and unfair is the growth of intangible property. As long as personal property consisted largely of live stock, commercial goods, household furniture, equipages, etc., that is, tangible property, it was possible to assess taxes against the own-

ers roughly on the basis of the value of the personal and real property together. With the development of intangible personalty, that is, particularly, corporate securities and stocks, the general property tax became a farce, as far as reaching the vast amount of intangible personal property was concerned. It was simply impossible for the local tax assessors to get track of these intangible assets, for there was no proof available of what they amounted to. In consequence, the owner of corporate securities, a kind of property that has been increasing in amount and value by leaps and bounds, could, if he desired, go scot free in the city in which he lived and in which he should be taxed.

The natural temptation to avoid paying taxes when that was possible, was still further increased by the nature of intangible property. These securities are purchased for their income-yielding character. Most of them normally, are expected to yield about five or six per cent of their market value. General property taxes, including state and county as well as local taxes, frequently amounting to from three to five per cent of the capital value, would be virtually confiscatory of the income received. Obviously, no man is going to pay over to the government any such proportion of the income he derives from property, as long as there is a way out. The difficulties of administering the general property tax, so far as these intangible values are concerned, has resulted in the situation that only a very negligible share of the amount that should be realized from this source has been received, in spite of the most strenuous attempts to force payment. The great majority of holders of intangible property simply prefer to perjure themselves, if necessary, by swearing that they hold no such property, or much less than they actually do, before they

will turn over the major part of the income from such intangible property to the city. This part of the general property tax is, therefore, for purposes of local taxation, a flat failure, and worse than a failure, for the widespread practice of making fraudulent returns with regard to the ownership of intangibles is bound to have a detrimental effect on the attitude of all elements in the country with regard to tax-dodging. Furthermore, it penalizes the very small number of excessively honest people who really make a fair statement of their intangible holdings.

The first and fundamental defect of the general property tax is, therefore, that it does not permit a legal distinction to be made between real and personal property, which actually exists, and is made in fact. As has been seen, there is this vital distinction not only between realty on the one hand and personalty on the other, but also between tangible and intangible personalty. Distinctions should also be made between different kinds of realty. The general property tax recognizes no distinction between the land itself and the buildings or improvements on the land. It is now coming to be recognized, however, that it is a wise policy to tax improvements on land at a lower rate than the land itself. Such a policy tends to discourage speculative holding of land and to encourage the improving of the same. If vacant land is taxed at full value, instead of at a lower rate, as is not infrequently the case, and the improvements put on it are taxed at only half of their value, the rate of taxation on the land plus improvements is only seventy-five per cent of the rate on the land alone, in case the value of the improvements equals the value of the land. This reduction in the percentage of the tax item will, of course, tend to encourage the productive use of the property by

the erection of improvements instead of leaving it idle.

The mention of the discouragement of speculation in land suggests another consideration to be discussed in connection with the taxation of land. For a long time many tax reformers have felt that the increase in land values, as a result of the growth of the city, is an item in which the city is entitled to share more than by the mere corresponding increase in the amount of the ordinary taxes. As a social question, it has been vehemently maintained that this increase in land values constitutes an "unearned increment" to which the owner contributes nothing, but which is the result of the development of the city, and that society is entitled to the increase therefor. It has already been pointed out that many European cities accomplish virtually this same result by themselves buying the land that will be needed for future expansion, and then realizing the unearned increment by leasing the land. But if this is a proper undertaking, there could seem to be no objection to accomplishing the same end by requiring that the unearned increment be paid to the city in taxes. This is, in fact, being done in many European cities today, notably in Germany, where not the whole of the unearned increment, but as high as twenty-five per cent of it, in some cases, accrues to the benefit of the city. Had this policy been followed from the outset by our American cities, there would have been enough taxes to do a great deal more than has been possible with the returns from the general property tax alone.

In this connection, it is necessary to mention a development closely related to the matter of the unearned increment tax and commonly associated with it under the name of the single tax. This far-reaching doctrine of taxation rests on the proposition that taxes on land should be the only taxes, and that, if properly administered, the fair-

est system of taxation would result from doing away with all other taxes but this single tax on land. A great deal has been written and said both for and against the single tax as a principle of taxation in general, and the arguments cannot be reviewed here. Whatever might be its merits if applied generally in national, state and local taxes, it seems safe to say that as a local tax in individual municipalities it would not prove adequate. The single tax movement seems to be gaining ground, however, and it is possible that actual experiments with the system may prove it to be superior to all others, in spite of theoretical objections of economists.

The basis of all fair taxation of land is, of course, a proper system of assessment. The fair and scientific valuation of land for purposes of taxation is an extremely complicated undertaking and one which has been almost uniformly very poorly done in all our cities. The chief trouble here, of course, has been, as in other departments of municipal administration, that our optimistic democracy considered that any citizen who was able to get the necessary votes to be elected as tax assessor, for instance, was *ipso facto* qualified to do that kind of work, no matter how ignorant he may have been or how complex the work. The practice of electing tax assessors, which administrative office is still very widely filled by popular election, had the further serious drawback that favoritism in the exercise of the office was likely to be profitable to the incumbent, and, so, hard to prevent, when practiced by an elective official. But even absolute honesty was no guarantee of satisfactory assessment. The commonest method relied upon until comparatively recent times in the great majority of American cities was to take the statement of the owner, in the first instance; to supplement this by a more or less superficial examin-

ation of the premises by the assessors, and to permit the owner to appeal to some board of review if his valuation had been raised by the assessors. The opinion of the owner as to the value of the land for purposes of taxation was, of course, practically worthless. Yet in many cases, owing to lack of energy or of a sufficient force of assessors, or, more frequently still, owing to the fear on the part of the assessor of making political enemies, this valuation was taken as stated, and increased only if a horizontal increase in the assessments was made necessary in order to yield the required amount at the existing rate of taxation. Even if the assessors themselves went back of the statement of the owner and attempted to verify the valuation, they worked practically in the dark. Oftentimes a mere inspection of the building and the lot from the outside and a glance into the interior of the building was all that could possibly be undertaken. Such a method, of course, merely substituted the ignorant opinion of the assessor for the biased opinion of the owner. There are so many factors that enter into the value of a piece of real property, that only careful investigation can avoid the grossest errors and injustices. Not only the size of the lot, but its shape, location, surroundings and adaptability for special purposes all play an important part in its value. For that reason real estate transfers, in the same neighborhood even, cannot be relied upon as safe guides. It is obvious that only some scientific system, based on the observation and examination of real estate values in a large number of different cities and carefully applied to the conditions in a particular city, can be of value as a substitute for the haphazard methods now of necessity employed.

Fortunately, several such methods have been devised and made available within recent years. These methods

depend upon the determination of a unit front foot value in each of the four sides of each city block. This unit front foot value represents the value of a strip of ground a foot wide and extending back the length of the normal lot. The value of this strip of land in the center of each block is determined by investigation of all available sources of information, chief among them being the opinion of real estate owners and dealers. After that has been determined, the assessor must take into account variations due to the length of the lot, its shape and its location in the block. For this purpose tables are available, prepared as a result of extended investigation in many cities, which show the average effect of these factors on the value of land. Different tables are prepared for the different kinds of city property, business, wholesale, tenement, residence, etc. It then becomes possible to plot every foot of ground in the city on a map showing what its value is supposed to be. Of course, as these tables represent the average results from a large number of investigations, they will never exactly fit the conditions in a particular place without a judicious allowance for local peculiarities. But while the task of making the first comprehensive valuation survey of the city may be beyond the capacities of local tax assessors, the application of such a system and its necessary revision can safely be intrusted to men of average intelligence and experience. A considerable number of American cities have attacked the problem of realty assessment in this comprehensive and scientific manner, and their testimony is practically unanimous that assessments under the new system are much more equitable and yield more revenue than under the haphazard system formerly employed. One of the chief gains, from a general civic point of view, to be derived from a scientific system of assessment is that

resulting from the changed attitude on the part of the taxpayers themselves. The glaring inequalities now found in every city under the old system of assessment, many of them due, no doubt, to political favoritism, but most of them merely the inevitable result of inefficiency in a complicated undertaking, engender a feeling of resentment which encourages fraudulent statements and all other devices for tax evasion. When every property owner realizes that he is paying his fair share of taxes, no more, no less, the task of the taxation department of the city will be greatly lessened and the revenues increased.

The valuation of buildings, which, unless they are to be exempted entirely from taxation under the application of the single tax doctrine, constitute a large share of the taxable values of cities, must, to be accurate, be entirely distinct from the assessment of the land. Here such items as the cost of construction, cost of reproduction, deterioration, etc., are more easily ascertained than is the market value of land, though other factors involve the necessity of using individual judgment to a very large extent. But even there engineering and other tables are available, which, if not insuring absolute accuracy, that being impossible, at least represent a marked improvement over existing methods. A separate tax map of the city, showing the location and value of all buildings in the city, is as necessary as is the lot map.

The collection of taxes in this country has suffered from the same defects of electing purely administrative officials that have pervaded the whole of municipal administration. Though cities have been endowed with the power of compelling tax payments, the amount of delinquent taxes in most cities is much larger than it would be if the collectors and the machinery of en-

forcing tax payments were not subject to the political influence of powerful delinquents. A more expeditious method of enforcing the tax lien against property and a greater security in the title acquired at tax sales would help this end of the taxation process considerably.

Besides the general property tax, there are other taxes that yield something to American cities, most of them in the nature of license charges. So in cities where the retail liquor trade is not forbidden, the annual returns from saloon licenses are not inconsiderable, though usually yielding but a small proportion of the entire revenue. Trade or business taxes are found in a number of Southern cities especially, and vehicle taxes, dog taxes, poll taxes and other forms of license charges are not uncommon. At best, these sources of revenue are relatively unimportant and cannot be regarded as presenting possibilities of increased revenue of sufficient amount to aid materially in the solution of that problem. The most important single form of direct taxes in German cities, the income tax, is practically not used by cities in this country at all. Theoretically the income tax would seem to present the ideal form of taxation, since an individual's ability to pay is more nearly measured by the income he derives from his activities and his property than in any other way. Its success as a local tax in German cities would seem to justify the proposal of its more general application in this country as well. The danger of adopting governmental practices that work well in other countries without considering their real adaptability to different conditions is, however, well illustrated in this case. Since a large part of present-day income consists of the proceeds of intangible property, it would be just as difficult to get at the income from the intangibles as it is to get at the value of the intangibles themselves, in

fact, more so. The same inequality, injustice and evasion would, therefore, result, under our system of government, in the case of the income tax, as results under the general property tax. Where the system of governmental administration, particularly in the matter of police control and registration, is as highly developed as it is in Germany, the possibility of tax evasion is very much less, and such a tax as the income tax, involving a thorough knowledge of the financial condition of every individual, can be applied with success, when in this country, in its present stage of governmental development, it would prove unworkable.

Another suggestion for an alternative to the general property tax is the habitation or occupation tax. This tax is based on the rental value of land and buildings, and is assumed to measure the financial ability of the individual by the amount of rental he pays. In the manner in which this tax was long applied in England, it had the very serious defect of encouraging speculation in unimproved city land, because an owner of vacant property could hold the land idle for a rise in values and pay practically no taxes upon it. Though this tax is supposed to fall upon the occupant, or tenant, it will, like the tax on the value of the property itself, be borne by the owner if the supply of rentable property is greater than the demand for the same.

There remains one other source of taxation which, though not very widely adopted in this country, seems to be becoming more and more popular. This is the tax on the property of public service corporations. A very effective campaign slogan for election to the city offices has been developed on the plea that these public service corporations should be made to pay a larger share of the city's taxes. Just what is the best method of assessing a

tax against these corporations is a matter of dispute, for it presents peculiar difficulties. But more fundamental than the question of how, is the question of why. It has already been seen that if the public service corporations of the city are properly regulated, they are entitled only to a reasonable return on the property invested, and that taxes figure properly in the operating expenses. To tax the public service corporations, therefore, amounts to taking money out of the pockets of the consumers of these public necessities and relieving the general taxpayers to that extent. This is a policy that is of doubtful wisdom because, as has been pointed out several times, charges for the necessities furnished by these corporations, being uniform, bear much more heavily on the poor than on the well-to-do, while taxes are supposed at least to be assessed according to ability to pay. It is owing to the general delusion that taxes on public service corporations are paid out of the profits of the corporation instead of out of the charges for the service, which makes this practice in taxation popular. In certain cases, it is true, taxation of the corporation may be about the only way of getting even partial returns to the public for excessive rates and poor service. If, for instance, a corporation operates under a franchise which fixes the rates of service, and the kind of service that is to be rendered, but does not give the city power to compel improvements in the service or reduction of rates to the point where the returns to the corporation are reasonable and no more, taxation may be resorted to to secure for the city some of the excessive profits of the corporation without prejudice to the rates and service which the consumers would enjoy anyway. As an emergency measure of partial control, when other instruments are not available, taxation of public service corporations may there-

fore be a proper source of municipal income. But as a source of taxation upon corporations which are already properly regulated in the interests of good service and low rates, it becomes a questionable policy.

General taxation, as has been said, is based upon the theory of contribution according to ability to pay, and is, or should be, a universal obligation, yielding the greatest part of the public revenue, because, if properly applied, it can be made to bear equally on all members of the community. The former conception of taxation on the basis of benefit derived, though no longer accepted as the proper basis for imposing general taxes, still plays a considerable part in the financing of public undertakings which enhance the value of property near the public improvement. Under the name of betterment taxes or, in this country more commonly, special assessments, this form of revenue constitutes an important part of the financial resources of the city for undertaking public improvements. It seems a consideration of elemental justice that if a public improvement, like street paving, sewer construction, park location, etc., increases the value of private property adjoining the improvements, as it virtually always does, such property should be charged with the expense of the improvement to the extent that its value is increased. This is, of course, in a way, merely a special and limited application of the doctrine of the unearned increment tax, discussed above. The so-called unearned increment is the increase in value resulting not from any particular undertaking of the city, but from the social and economic forces of the city's population, while the increase in value resulting from public improvements is the consequence of a definite undertaking requiring the outlay of money. The special assessment is much simpler of application, therefore, and the fact

that it takes care of an expense which would otherwise be borne by the general taxpayers of the city makes the justice of its application more apparent to the general public than is the case of increases in value resulting from gradual developments not occasioned by the governmental action of the city, and not paid for out of the public treasury. Consequently, the special assessment as a means of meeting the expense of improvements of this kind is very widespread in the cities of the United States.

The basis of the special assessment being the benefit derived from the increased value of adjoining property as a result of the improvement, it is obvious that the amount which the property can fairly be made to pay must not be made to exceed the amount of increase in the value of the property, and resort is had, in the last analysis, to the courts, if it is claimed that the property is charged with more than its increase in value. Generally speaking, however, if all of the property benefited is charged with the amount of the increase in value it has experienced, most public improvements of the kinds mentioned could be paid for entirely out of the special assessments, though, of course, there is a great difference in this regard between various kinds of improvements. A park, for instance, located in a crowded residence district, will create enormous increases in the desirability and value of the surrounding property. A sewer, on the other hand, though of very expensive construction, may result in but a slight increase in the market value of the property served. In practice, cities vary a great deal with regard to this matter. In some cases cities obtain almost the entire cost of street construction from the abutting property. In other cases they have to pay a large part of the cost themselves, constitutions, laws or charters frequently imposing a limitation as to the amount of the

total cost that may be assessed against the adjoining property. It is quite commonly argued that, since the general public uses a paved street and benefits thereby, a portion of the cost of construction should fall upon the general treasury, an argument that makes a ready appeal to real property owners. But if the special assessment leaves the property owner with an increase in the value of his property which is at least equal to the amount he has to pay, there seems to be no injustice done, even if the city and the general public also benefit. The paving of a street is but the initial cost, and the cost of repair is properly charged upon the general public which uses the street. A question arises with regard to the proper distribution of the cost of repaving the streets. It seems clear that the ordinary repair of streets should not be charged against the abutting property, since the value of this property is not increased by such repair over what it was when it was new, though in some cities property owners are so charged. Even if an entirely new pavement becomes necessary, it cannot be claimed that the abutting property is enhanced in value as a result of new pavement over what it was worth when the old pavement was new, the wear and tear on the pavement being the result of general use. It is true that the property is worth more if the pavement in front of it is in good repair than if it is not, but this difference in value is represented by a real though possibly hidden decrease in value from the time when the pavement put in by the property owner was new. It is only in case a repaving results in the laying of a pavement which, by reason of superiority over the old pavement when new, makes the property more desirable than it would be even with a new pavement of the former type, that any increase in property value can be attributed to the operation of repaving. The same

considerations should be operative in the case of other public improvements that are paid for by special assessment. After the initial cost of construction has been met by the contribution of the increased realty values, further charges should be borne by the general treasury.

Although the increase in realty values resulting from public improvements is properly levied upon for the payment of such improvements, such increase is ordinarily not realizable at once. Whether the increase is to be realized in the sale price of the property or by increased rent, it will be some time in actually being recovered. The special assessment may, however, amount to a considerable sum and prove embarrassing to the owner of the realty at the particular time it is assessed. To meet this situation, it is common to allow the owners of the property assessed a number of years in which to pay the sum assessed, paying interest meanwhile at the rate at which the city would have to pay were it making the improvement. If the work is to be done by the city directly, the method of payment can more easily be accommodated to the convenience of the owner than if the work is done under contract. The advantage of having this kind of work done under contract, however, lies in the fact that, by making the assessment a lien against the property only and not a contract charge upon the city, the city does not need to use its credit or exercise its borrowing power, both of which are limited and may be needed for other purposes in that direction.

If adequate machinery for limiting the maximum amount of special assessments levied against property to the actual increase in value is provided, there would seem to be no need of limiting this power of the city by law in any other way. Yet cities are frequently prevented from using this power of public improvement by other legal

restrictions. For example, a common provision of law limits the imposition of special assessments to the abutting property. In actual fact, however, a great deal of property is increased in value as a result of public improvements which is not abutting on the improvement itself. A public park, for example, enhances the value of property for a considerable distance from the location of the park, and even a street pavement improves the property which is located on cross streets near the paved street. It is apparent that if special assessments are to be borne by the property benefited, it is not only proper, but is demanded, in fairness to the property owners affected, that all of the property actually benefited and not merely a part of it be compelled to contribute. Larger assessment districts are therefore desirable. Another common limitation requires the approval of a majority of the affected property holders for a street pavement, for instance. If the paving of a street, or the location of a sewer, or the construction of any other improvement is demanded by considerations of general convenience or necessity, there is no need or reason for consulting the wishes of the affected property owners. The improvement is not undertaken for their benefit but for that of the public at large, and they do not suffer by it, since their property is enhanced in value by at least as much as the amount they are required to contribute.

It is safe to say that the betterment tax or special assessment, could and should be used to a much greater extent than it now is. It violates no principle of equal taxation, and it opens up the possibility of much more extensive public improvements than are ordinarily possible under the limitations on the borrowing power and the taxing power which will be noted farther on. In England, where the betterment tax had its origin, it is

again being resorted to more and more under the increasingly perplexing problem of getting sufficient local revenues, though for a long time it fell into disuse and is even now generally unpopular.

As a means of securing revenue for public improvements, another device, which has been touched upon already in another connection, must here be referred to again, namely, the power of excess condemnation. This is virtually a device for securing to the city the whole of the increase in value of property abutting on a public improvement, instead of only a part of it, as is the case under the special assessment plan. If the city is empowered to condemn not merely the property actually needed for a street or park improvement, as is the case ordinarily with American cities, but also the property immediately adjoining it, as is done in many European cities, then by paying the price which the property was worth before the improvement was made and obtaining the price which it became worth as a result of the improvement, the city secures the entire increase in the property values. This plan has the great advantage of insuring to the city all of the increase in values, but it presents some danger also. The experience of American cities seems to show that in general they are poor bargainers, and that whenever private property has to be condemned the city pays a good deal more than a private purchaser would have to pay for the same land. In that case, of course, the city might easily pay a bigger price for the excess land before the improvement is made than it could receive by sale after the improvement is finished, a disastrous situation. It would be desirable, therefore, to improve our method of determining the compensation to be paid for land condemned by eminent domain before this power of excess condemnation is gener-

ally granted. Furthermore, the scheme has this disadvantage, that the initial outlay for the land condemned would be greater and would have to be met by borrowing where the city has no special fund for this purpose, and this might involve the use of greater borrowing power than the city enjoys, even though the debt is offset by property which is convertible at a higher price. The remedy in this case, as in other phases of the borrowing activities of cities, to be considered later, is to be sought in distinguishing between debts incurred for improvements that are not marketable and yield no money returns and those that are salable or do produce an income.

Before turning to the other two general sources of municipal revenue, a word must be said about the general limitations on the taxing power of cities. The practice with regard to American cities has been to limit the power of cities greatly both as to kind of taxes and the amount of taxes. Cities have not been given general powers of taxation, but are limited to the kinds of taxes enumerated, as well as in the purposes for which taxes could be raised. The total amount of taxes has usually also been restricted by constitution or by law to a certain amount per hundred dollars of assessed property valuation. There are not lacking those who believe it is necessary to restrict the taxing power of cities in all of these ways. On the other hand, there are extreme advocates of home rule who believe that no limitations of any kind should be imposed upon cities either in the sort of taxes that can be imposed or in the total amount of taxes. Municipal taxation, they say, bears solely upon the taxpayers of the city, and, being imposed by the representatives of the local taxpayers, the regulation of the kinds and amounts of these taxes can be left to the self-interest of the persons affected.

Theoretically, this latter contention would seem to be sound, but in practice the alleged safeguards against extravagance have not worked out effectively. This has been due principally, of course, to the fact that our city councils, which impose the taxes, have in many cases acted in disregard of the city electorate in the matter of taxation, just as in other matters of municipal concern. Log-rolling in appropriations has been as characteristic of city councils as of the national legislature, and the pork-barrel has resulted in similar extravagance and increased cost of government, necessitating much higher taxes than the legitimate expenditures of the city would have required. But there is still another reason for the failure of the automatic checks on extravagance that might be expected through the control of the taxpayers over the council. Municipal taxes in this country are derived, as has been seen, from the general property tax. This, it has been shown, has worked out to be virtually a tax on real property alone. Only real property owners are, therefore, direct taxpayers, and the owners of real property in modern cities are almost always but a small minority of the voters, and very frequently but a very small per cent of the electorate. Now, although every member of the community indirectly shares in the burden of taxation, even when assessed directly only upon real estate, since rents and the price of all articles of trade and consumption are affected by it, yet it is well known that the person who thus contributes indirectly feels the burden much less strongly than the one who himself pays the money to the collector. The great majority of people in every city are therefore but dimly aware of the burden of taxation, if at all, and are consequently not much concerned about exerting influence on the council to spend the public money wisely and with moderation.

If it be granted that the local political checks on extravagance in the cities do not prove very effective, it still remains to show why the state should be concerned. The interest of the state is obvious. In the first place, a city may bring itself into insolvency, which necessitates state action, and may require direct state administration in order to put the municipality in a position where it can perform the functions in which the state is directly interested, such as police protection, education, public health, etc. In the second place, the state as well as the city requires revenues, and state taxes are mounting each year as well as municipal taxes. If the city is given a free hand as to the objects of taxation and the amount of taxes, the taxing power of the state may be seriously interfered with. There is a limit beyond which a certain kind of taxation cannot go, a point of diminishing returns at which a given source of revenue may be exhausted. For that reason, it becomes necessary to divide up the field somewhat, leaving certain sources of revenue to the state and certain others to the city. This cannot be done if each city is free to go its own way, and hence some uniform regulation is required as to the objects of taxation. Certain taxes, furthermore, can more easily and fairly be assessed by the state than by the cities, such as corporation taxes, for instance, and taxes on mortgages, which are very likely to be subjected to double or multiple taxation if cities are left free to treat them as they see fit. For these reasons it seems evident that some sort of legislative regulation of the exercise of the taxing power as regards the character of the taxation is required. The greatest possible latitude consistent with conserving the interests of the state should be allowed in this regard, however, for a good deal of experimentation will be necessary before the actual working out of tax schemes that

seem satisfactory in theory can be demonstrated. Experimentation is safer and more likely to occur in individual cities than in the state at large, and must therefore be encouraged by a liberal amount of choice.

The amount of taxation is also a matter to be regulated by the state in its own interests, but it is not a matter which is adapted to legislative regulation. To establish arbitrarily a maximum amount by law or, worse yet, by constitutional provision, as is commonly done, is to ignore the enormous differences that exist in cities. Whether a tax rate of five dollars on the hundred dollars of assessed valuation is too high, or whether a higher rate should be allowed, cannot be answered for all cities alike. There are many factors that enter into the determination of this question, factors that may point one way in the case of one city and the opposite way in the case of another. The purpose for which the increase is needed, whether for a necessity or a luxury, whether for an emergency or for a continuing need, the general financial condition of the city, the rate at which property values are increasing, etc., all have a bearing on the question. These factors must therefore be given individual consideration for each city, and that is an administrative, not a legislative function. A state board or commission, therefore, and not the state legislature, is the proper body for exercising limitations on the amount of taxation that cities can employ.

The second class of revenues for cities is that derived from income-producing property belonging to the city. The chief sources of this revenue are the public utilities owned and operated by cities. As has been seen, a much larger share of municipal revenue comes from such undertakings in European cities, notably those of Germany and England, than in American cities. The growing

burden of direct taxation is driving many English cities into municipal trading, as it is called, not only in the field of public utilities, as commonly understood, but also into the manufacture and sale of such commodities as are profitable by-products of utility undertakings. The doubtful policy of turning to public utility operation with the object of financial profit primarily in view has already been dwelt upon in more than one place. Tempting as is this avenue of escape from the necessity of increasing still further the burden of direct taxation, there is nothing that can be said for the policy of a city dealing in public necessities on the principle followed by the private corporation of giving as poor service as possible and charging high rates. This much can be said in favor of a policy of managing a public utility in such a way as to yield a reasonable profit to the treasury over and above all expenses of operation, that the consumers are charged no more than they would have to pay if the utility were operated privately under the best kind of regulation. But to attempt to get larger returns than that is little short of a social crime, no matter how much the city treasury may need the money. On the other hand, the policy of engaging in the manufacture of profitable by-products which are not necessities and do not come under the head of public utility undertakings, if efficiently carried out, has the merit of yielding much-needed revenue without imposing a disproportionate financial burden on those who are least able to bear it. If the city, however, goes into other commercial activities not affected with a public interest, for the purpose of making profits in competition with private enterprises, it is embarking upon a very dangerous course. With the possibility of success must also be considered the possibility of failure, which would leave the city in a

worse financial position than before, and certainly, in this country, cities have as yet given no very good evidence of ability to compete successfully in business administration with private concerns. It seems, therefore, that profits from public utility operations are not to be looked to as possibilities of great financial returns, the maximum net income to be derived from such undertakings being properly limited to a reasonable profit on the capital invested.

Next to public utilities, the commonest source of income-yielding property owned by cities is productive real estate. American cities, it is true, derive but a negligible income from that source, cities rarely having the power to acquire or keep property not actually needed for a public purpose. But European cities, especially those of Germany, have entered upon the plan of acquiring real estate both within and without their limits to a large extent. The justification for this policy is not merely financial, it is very largely social. If the city owns the property itself it can direct the proper development of the city, can establish zones, regulate housing and accomplish generally the social features of city planning in a way that is not possible by any kind of governmental regulation. On the financial side, furthermore, the policy of buying real estate at low values and leasing it at increasing rent has the merit of securing for the community the benefit of the unearned increment, that is, the increase in realty values resulting from the growth of the community. This is a measure of social justice as well as a very profitable source of additional income. Here again, however, the condition of success is careful and expert administration, a requirement that is generally met in German cities but rarely in those of the United States. What proves, therefore, a very desirable measure there,

will need to be carefully safeguarded here if it is not to be productive of as much harm as evil.

The third main group of sources of municipal revenue comprises subventions from the state governments. This source of income, like the one just considered, is very much more important in European cities than it is in American cities. In German cities the state subventions for various local purposes constitute as much as one-fifth of the entire available revenues of the cities, and even in England the policy of state aid provides as much as one-sixth of the municipal income. In many American cities there is practically no state aid, and in those states in which aid is granted only a very small share of the city's revenues come from that source, usually being in the nature of grants for public school expenses. It has been suggested in another place that, since a great many of the activities of cities are of almost as much direct interest to the state as to the city itself, there would seem to be a *prima facie* case in favor of having the state contribute to the expense of these undertakings. For instance, the police force of a city, as has been seen, is engaged quite as much in enforcing state laws as it is in enforcing local ordinances. Why, then, should not the state contribute its share toward the preservation of the laws of the state? If the state were nothing but the aggregate of its cities, it would simply be taking money out of one pocket and putting it into another to have the state aid in the support of the city police force. But most of our states are less than fifty per cent urban, and many of them are much less than that. To have the state contribute toward the expense of enforcing state laws in the cities shifts a portion of the amount of these grants on the rural population, who are as much citizens of the state as are the urbanites, and who have some interest in the general

enforcement of the law both in and out of the cities. The existence of such an interest is perhaps best shown by the practice of legislatures, made up largely of rural representatives, in passing laws intended to regulate the conduct of city dwellers in a variety of ways. It is only justice, therefore, to make the state, as a whole, contribute to the cost of such municipal activities as police protection, education, public health and the others that have a direct importance for the state as a whole.

Of course, the proposal to have the state contribute to municipal undertakings, on the ground that the state is concerned in their proper performance and benefits thereby, carries with it the corollary that the state shall be in a position to see that the money so granted is wisely spent, which means a certain measure of state control. The difficulty immediately arises as to how great a measure of interference the state may properly claim on the score that it is contributing to the expenses of the undertaking. In matters of mutual concern it is no more desirable that the state should have the entire say than that the city should have it, but the trouble lies in providing for the exercise of a concurrent jurisdiction. In French and German cities the central government exercises virtually a determining influence in these matters, including, among other things, public health activities, police administration particularly being treated as though it were almost wholly a state function imposed upon municipalities for convenience. Somewhat the same situation exists, however, with regard to public education. In England, public health and public education are also under careful central supervision, and this is especially true of poor relief. As great a measure of central control as is found in these cases would probably fail to appeal to the American point of view and could

probably not be put into effect even if state administration were on a much higher plane than it commonly is. But a practice which is applied in England with regard to police administration seems to promise more likelihood of being adopted in this country and of accomplishing in a measure the purposes of central control, that is, the practice of making the grant of the state subventions to municipalities for police purposes dependent on the maintenance of certain minimum standards of efficiency by the city. In this way the state can exert a strong influence in directing developments in these activities without actually having the power to give orders or interfere with management. Should a city find the state influence a bar to progress, it would have the alternative of following its own inclinations and giving up the state subvention. There would seem to be no objection to the widespread adoption of such a device which relieves the cities of some of the burden of administering matters of interest to the state, and yet gives the state some assurance that its contributions will be spent with reference to the interests it seeks to conserve.

Speaking generally, therefore, the greatest possibilities of meeting the problem of increased revenues for cities in this country seem to lie in the direction of improved methods of taxation and a larger measure of state aid, with the prospect of developing the other sources of income considerably beyond their present position as the machinery and practice of municipal administration in this country become more efficient. As a necessary step in this direction, constitutional and legislative restrictions will have to be removed, scientific principles of taxation established, and the necessary supervision of local taxation exercised through administrative authorities of the states.

CHAPTER XII

MUNICIPAL FINANCES—DEBTS, BUDGET AND ACCOUNTING

In the chapter on municipal revenues no mention was made of one very important method of getting the money necessary to do the work of the city, namely, by borrowing it. A great deal of money is obtained by cities, and, as will be seen, properly obtained, by the process of borrowing it on the credit of the city, and this constitutes a very material part of the sources of municipal revenue. But since the money so borrowed has to be repaid, and interest has to be paid on it until it is repaid, these debts are also a source of municipal expenditure. Consequently municipal debts are not properly to be regarded either as purely sources of revenue or of expenditure, but fall between these two phases of municipal finance and must be separately considered.

The first fact to be noted with regard to municipal indebtedness, and one that because of its patency is frequently emphasized, is the startling rate at which municipal indebtedness has been increasing. Not only is the total amount of indebtedness increasing from year to year in all cities, but the relative amount, whether compared with the increase in population, with increases in assessed valuation of property in the city, or with the increase in revenues. This increase is popularly viewed

with great alarm, as an indication that cities are being carried along irresistibly toward bankruptcy, and something must be done to stop the ruinous course. In this country particularly the "outs" in politics find an easy and successful avenue of attack against city administrations on the charge that the indebtedness of the city has been increased by the extravagance of those that are "in." The situation is serious enough, as will appear, even when stripped of misleading aspects. At the same time it is necessary to point out, in the beginning, that the figures adduced are usually misleading and the conclusions reached generally unsound because of the failure to make certain necessary distinctions.

In the first place, there is a considerable number of persons who seem to think that all municipal indebtedness, like individual indebtedness, is improper and that cities, like individuals, should pay for what they get as they get it, instead of running into debt. The question therefore arises: Is municipal indebtedness necessary or desirable, and, if so, why? A moment's consideration is sufficient to show that, to a certain extent, the situation objected to is both necessary and desirable. With regard to all current expenses of municipal administration, it is true that the policy of pay as you go is the only proper one, though unfortunately, even in that case, it has not been applied and cities have improperly borrowed money from year to year, or even for a period of years, to meet such expenses. But with regard to permanent public improvements and public works the situation is quite different. It has been seen that a great many public improvements, such as street construction, the laying out of parks, the building of sewers, can be paid for by the owners of property which has increased in value by the amount of the cost of the undertaking as a result of the

improvement. But there are many other necessary public works and improvements which cannot be so financed because there has been no corresponding increase in adjoining property values. The erection of a city hall, of schools and fire stations, of public libraries and like structures does not usually result in a very great increase of property values adjoining, while other structures, such as sewage or garbage disposal works, jails, etc., actually decrease the value of adjoining property. The expense of such undertakings must consequently be met by the city itself. Frequently the cost of constructing such works runs into the thousands, hundreds of thousands or even millions of dollars. To pay for their construction in cash would obviously, in many cases, be quite impossible since the special tax that would be necessary to meet this expense would impose too serious a burden and would in many cases be unavailable because exceeding the constitutional or statutory tax rate. Even were there no practical or legal objections to meeting the expense by a special tax levy, there are considerations of justice to be kept in mind. A public improvement of the kind mentioned is not, as in the case of supplies used by the city, for instance, consumed or used up in a single year or even in a few years. It is built to last ten, twenty or even fifty years, as the case may be, and its use is participated in not merely by the taxpayers and citizens of a given year, but it may be even by the next generation. Common sense and justice, therefore, demand that the burden of paying for an improvement which serves the city for many years should be distributed over the period of time during which it renders service. This can be done only by borrowing the money necessary to pay for the construction of the improvement and then distributing the payment of the interest and the principal of the

debt over a number of years corresponding to the period of usefulness of the improvement. So far from being impolitic, therefore, the incurrence of debts for this purpose is a wise policy of municipal finance and is absolutely necessary in order to enable cities to construct those public works which, like waterworks, are essential but may be very expensive. There is, of course, a limit beyond which it would not be expedient to go even for such undertakings, and under the proper safeguards as to the term of the debt and the manner of providing for its liquidation, a matter that will be considered a little later, since the cost has to be met out of the revenues of the city, and those, as has been seen, are not unlimited. But as between the increase in taxation due to increased current expenditures, such as salaries or new activities, for instance, and increase in taxation for meeting interest and a portion of the principal of a debt for a permanent improvement, it is simply a question of relative need, not one of sound finance administration, as seems to be commonly believed.

Permanent improvements, themselves, may properly be divided into several categories which differ among themselves as to the effect of the indebtedness incurred for them on the financial condition of the city. The first class of improvements are those which, like most of those mentioned above, are a public service and nothing more; that is, the improvement represents a service value to the community but is not a financial asset. Such, for instance, are school buildings. They not only yield no income of any kind, but are not marketable, and do not therefore represent anything in the nature of real capital value. The investment in such improvements is therefore realizable in service only. Next there are improvements which, though not yielding a revenue, have a mar-

ketable value which is to that extent an asset. Such, for instance, are lands acquired by eminent domain proceedings under a power of excess condemnation. Although the city may have had to incur indebtedness in order to get the money to pay for this excess land, the market value of the land is realizable by sale. Obviously such value offsets to that extent the amount of indebtedness incurred for it, and the city, though more in debt, has assets to offset what is only an apparent, not a real, liability. To a certain extent, much of the land owned by the city has a potential value, if it is no longer to be used for a public purpose, which may properly be considered under the head of assets, offsetting to a limited extent the obligation incurred in buying it. So, for instance, a city may own a large amount of land for a sewage farm, which was bought with money borrowed for that purpose. If the city later finds that the septic tank process or some other form of sewage disposal requiring but very little land is more satisfactory, the sewage acreage represents a realizable asset which may more than offset the original indebtedness incurred for its purchase. But much the greater part of the land owned by American cities is not a financial asset which can be balanced against the indebtedness, for it is adapted only to use for public purposes. So, for instance, streets and parks represent dedications of land to non-profitable public purposes which are practically permanent.

A third class of municipal improvements which, though necessitating the incurrence of debts, does not represent a net increase of liability of that amount is the erection or purchase of public utility income-yielding plants. Interest and principal repayments are properly chargeable to the cost of service of such utilities and should not, therefore, appear as burdens upon the other revenues of

the city. Even if the plants themselves should prove to have only a relatively slight marketable value as compared with their cost, should the city decide to turn them over to private enterprise when the indebtedness has all been paid out of the earnings of the undertaking, yet no real financial burden has been imposed upon the city by the borrowing of money for that purpose. It may easily be the case, therefore, that a city is financially better off as a result of borrowing money for such productive enterprises than it would have been if it had not done so, and that a city with ten million dollars indebtedness, eight million of which were put into the construction or purchase of income-yielding utilities, is financially much better off than is a city with three million dollars indebtedness, all of which has gone into improvements which yield no income and have no marketable value.

The measure of the financial condition of a city is by no means, therefore, the amount of indebtedness, but the kind of indebtedness. The seriousness of the enormous debts owed by American cities arises, in fact, not so much from the increased use of the borrowing power, but from the improper use. As has already been stated, to borrow money for current expenses is simply to pass on to next year's taxpayers the cost of benefits which are already used up and gone, and represents the most despicable sort of public finance, for its tolerance rests upon the natural human desire to pass one's obligations on to someone else, or to put them off to a future time for settlement. If a city of a hundred thousand people has a million dollars of annual current expense, it would require a yearly tax rate of ten dollars for every man, woman and child in it. If, instead of levying that rate for meeting the expenses, the city authorities borrow a million dollars, the immediate obligation of the city is

only the interest payment, which at five per cent would necessitate a tax levy of fifty cents per head of population instead of ten dollars. Small wonder that so tempting a method of meeting financial problems was so widely practiced in this country, before measures were adopted to prevent it. Even if a portion of the capital were repaid or set aside each year so that the bonds could be met at maturity, the tax rate would be greatly below the ten-dollar amount necessary to meet the current expenses in that way. Each year of such finance administration piled up an ever-mounting inverted pyramid of payment until bankruptcy was the only way out.

Next to paying current charges with borrowed money, one of the commonest abuses of the borrowing power of American cities has been the practice of borrowing the money necessary for a public improvement for a term of years extending clear beyond the period of usefulness of the improvement. The theory that successive users of a public benefit should contribute their fair amount of the cost of such improvement instead of saddling it all on the taxpayers of the year in which it was constructed, has been perverted into making successive taxpayers pay for a public improvement which has disappeared and is no longer of use or benefit to anyone. The effect here is just the same as it was when current expenses are met by borrowing money, and the temptation is almost as strong. Another fundamental principle for the exercise of the municipal borrowing power, is therefore, that arrangements must be made that the principal of the debt shall have been paid off within the period of usefulness of the public improvement.

A third defect in much of the debt administration of American cities has been found in the failure to make provision for meeting the principal of the loan when it

becomes due. The failure to pay interest on a debt would result in judicial proceedings at once on the part of the city's creditors, hence the interest payments had to be taken care of. But the principal, if it did not have to be repaid until at the end of a long period of years, might be ignored without immediately disastrous results. Even at maturity there was always the expedient of borrowing more money to pay the obligations then due, and so the necessary steps for meeting the principal were frequently ignored, resulting in an alarming increase of indebtedness with no way of diminishing it. A fundamental part of the debt administration of cities is therefore the proper provision for repayment of the principal. The best way to provide for this will be taken up under the consideration of municipal bonds.

Municipalities may get into debt in two general ways. They may fail to meet obligations for services or materials or damages in suits when they become due, or they may borrow money outright for public purposes. The first kind of indebtedness is commonly called the floating debt, there being no special provision made for meeting it. Such debts are frequently carried on from year to year until resort is had to borrowing money for meeting the obligation. The evils of this sort of finance have already been discussed. There is no excuse for a city's carrying this kind of indebtedness beyond the time of the next tax levy, never more than a year, therefore. If the financial administration of the city is conducted as it should be, there is virtually no excuse for this kind of indebtedness at all.

When a city borrows money outright, it may either make short-time loans for a specific purpose, such as carrying the city over in its current expenses until the taxes come in, or it may make long-time loans running over a

period of years. The former kind of loans, for which the city ordinarily gives non-negotiable instruments as evidence of indebtedness, also constitute part of the floating indebtedness of the city. They are also, ordinarily, the result of poor municipal housekeeping, for the tax levy could just as well be made payable at the beginning of the fiscal year as at the end, and the city, therefore, be able to pay all of its current obligations as they become due. Payments under continuing contracts and emergency loans for unforeseen and urgent necessities would seem to be the only kind of floating indebtedness that it is not possible to avoid altogether.

Long-time loans must ordinarily be secured by negotiable evidences of debt, called bonds, which, since they are now ordinarily secured by legal provisions requiring the creation of a sinking fund out of the current revenues to meet the principal when due, constitute what is known as the funded debt of the city. The advantage of the issuance of municipal bonds, which are legally secured and are negotiable, is that the city can in this way secure money at a lower rate of interest than it would have to pay if the money is borrowed without the issuance of such bonds. The power to issue bonds for the purpose of borrowing money is therefore a very important power, which, unlike the power of borrowing money directly, was not considered an inherent power of the municipal corporation. It must be expressly granted to cities by law, and the grant of power must be accompanied with the safeguards necessary to insure the proper use of this power by the city.

Among the most important considerations arising in connection with the issuance of municipal bonds, after the legality of the bonds, the expediency of their issue and the term of years for which they are to run have

been decided upon, is the manner of providing for the repayment of the principal. Two general methods are possible. Either the entire amount of the bond issue can be made to fall due at the same time, or the repayment of the principal may be made annually in smaller amounts until paid. In the first case, it is necessary to set aside a definite amount each year into a special fund which will be sufficient at the end of the term of years for which the bonds were issued to redeem the principal. The administration of these sinking funds in American cities, even when they came to be required by law, as they now universally are where the bonds all mature at the same time, has been involved in so much difficulty through inefficiency, carelessness or even dishonesty, that it has not proved a very satisfactory system. A better plan is to issue the bonds in series payable in successive years until all are paid off. If the principal payments are made equal for each of the successive years, the total annual charge for principal and interest decreases yearly, corresponding in a measure to the decrease in the value of the public improvement for which the bonds were issued. The great advantage of this plan is that it insures the regular retirement of the principal, which even under strict laws is not always secured by the sinking fund plan. It simplifies the finance administration of the city by eliminating the distinction between net debt and gross debt, which affords opportunities for confusing the citizen as to the condition of his municipality with regard to indebtedness.

It is not uncommon to stipulate in bonds in the ordinance providing for their issuance or even in laws governing their issue that they shall not pay more than a certain maximum interest. Such a provision is, of course, of little effect, since their salability depends on the in-

terest yielded. If too low a rate of interest is stipulated, either the bonds will not sell at all or the purchasers demand a bonus amounting to the difference between the face value of the bonds and the market value at the rate of interest stipulated. Of course, the city has the choice between selling the bonds at a low rate of interest or not at all, and it may sometimes be that some contemplated improvements could wait until the market was better and the rate of interest higher, but if the city has to have the money, the lenders and not the borrowers determine the actual rate of interest, which may be different from the face value. Municipal bond issues are usually subscribed for by banks and bond houses on a more or less competitive basis. They make their profit, in turn, by selling the bonds on commission. A plan that has a good deal to commend it is the practice of issuing the bonds in small denominations and encouraging citizens of the city to invest in them. This has great possibilities in the direction of stimulating a feeling of real participation in the affairs of the city and an increased interest in all its doings, especially on the financial side. A city could even afford to lose something in premiums paid by bond houses in order to enlist this practical participation by its citizens. If such bonds were exempted from taxation by law they would undoubtedly prove very attractive investments for local citizens.

Mention has been made of the necessity of controlling by law the administration of municipal debts in the interests of sound finance. Such regulation is absolutely essential, as experience has shown. But in addition to regulating the manner of meeting bonded obligations, and an enumeration of the purposes for which bonds may be voted, limitations are commonly imposed by law on the amount of indebtedness that cities may incur. The com-

monest provision is to fix the total amount of bonded indebtedness which a city may legally incur at an amount equaling a certain per cent of the total assessed valuation. What was said with regard to the folly of fixing an arbitrary maximum tax rate for cities by general law applies with even more force in the case of municipal bonds. To fix a maximum bonded indebtedness is to ignore the very essential differences which were noted above with regard to the kind of improvement for which the bonds were issued. The necessity or wisdom of a given bond issue cannot be determined solely or even largely by the amount of bonded indebtedness already outstanding, but only with reference to a number of factors that vary with each individual case. Legislative provisions determining the maximum amount of bonds should therefore be done away with and administrative control substituted which will give to state authorities power to compel the observance of the provisions of law with regard to the purposes for which bonds may be issued and the manner of meeting the interest and redemption charges. The system of requiring the administrative approval of central administrative authorities for the issuance of bonds by municipalities is in force not only in the countries of continental Europe but in England as well, the historic land of traditional home rule in local government. It must not be thought, however, that even such supervision is intended in theory or does in practice keep the amount of indebtedness down to a low figure. On the contrary, European cities are as much in debt as American cities. If municipal debts are properly incurred, that is, only for permanent improvements, and properly administered, that is all one can hope to have accomplished. Indebtedness, like taxation generally, is bound to increase with the growing demands of modern

society and with the increased difficulty and cost of providing the essentials of decent community existence.

One other consideration remains to be mentioned again in connection with the issuance of bonds, though it has already been touched upon in another connection. Since the issuance of bonds, like the granting of a franchise, involves the creation of a situation by the governing authorities of the city, which it is beyond the power of succeeding incumbents to remedy, this seems to be a situation *par excellence,* where the use of the referendum is demanded. The only protection which the electorate can have against irremediable action increasing the burden of indebtedness is by being given an opportunity to approve or disapprove of a proposed bond issue before it goes into effect. It is true that, in the past, city electorates have seemed to be all too ready to sanction the issuance of bonds and have shown little discrimination in this regard. But this has been partly owing to the fact that where proper restrictions on the purposes for which bonds could be issued have been lacking, the temptation to authorize what was virtually the payment of current expenses out of bond issues has been too powerful, because it lessened an immediate financial burden at the expense of future years. But where bonds can legally be issued only for permanent improvements and then only for a term of years corresponding to the period of usefulness of the utility, and especially if the serial form of bonds is employed, imposing an unescapable obligation of paying a definite portion of the principal each year, this temptation will be somewhat diminished. The issue then will be not whether to let some one else pay later, but whether the improvement is sufficiently desirable or necessary to warrant the assumption of the additional burden. In any case, even an unthinking approval is

better from every point of view, than no expression of opinion at all, since the electorate will have only itself to blame. There is evidence already, moreover, that not all municipal electorates are in a frame of mind to approve every proposed issue of municipal bonds.

While borrowing represents, as has been seen, an important and, indeed, essential method of getting revenues, it constitutes, on the other side, through the principal and interest charges, one of the most important items of municipal expenditure. The proportion of total expenditures assigned to this item varies, of course, greatly, in different cities, but amounts on the average to about one-fifth of the total expenditures. Next to the cost of maintaining the public school system, which is almost everywhere the largest single item in American cities, and frequently amounts to as much as one-third of the total expenditures, the debt charges are the largest single expense. After that come streets, police protection, fire protection, sanitation, usually in the order named, with all other expenditures, except the operation of public utilities, lumped together occupying the last place.

The question as to what is the proper relative amount to spend on these various items is one of very large significance, for it is the fundamental question of the proper policy of municipal administration. As such it will be touched upon briefly in the concluding chapter. At this place the matter of chief interest is the question of how the expenditures are and should be determined and the method of keeping accurate account of the money expended. Since the power of passing appropriations is really the fundamental power of determining the policy of the city as to its expenditures, that function would, in a representative government, have to be exercised by the legislative body, that is, the city council, which au-

thorizes the taxes and other sources of municipal revenue necessary to meet the expenses. But experience has shown that in dealing with appropriations, that is, the amounts of money set aside for particular purposes, city councils have generally been very little, and frequently not at all, concerned with the question of general policy involved in the fixing of relative expenditures. Each councilman has had his particular interest which he felt it his business to push without regard to the question of relative desirability or of total expenditures. The councilman with the most political influence secured the largest appropriations for his particular interest. What made matters worse was that the things councilmen were interested in getting appropriations for were quite frequently not matters of general concern at all, but improvements for their own wards, whether needed or not. Councilors, like their prototypes in Congress, found that the easiest way to secure a desired appropriation was to trade their support for some other councilor's pet scheme for raiding the treasury in return for the promise that his appropriation would be given a favorable vote. The result was inevitably not only that appropriations corresponded in no way to general public interests, but also that appropriations bore no necessary relations to the income which would be realized from the tax rate and other revenues provided for.

Both from the point of view of coördinating the various items of expense for which money is to be appropriated and of insuring that the totals of appropriations shall not exceed the totals of anticipated revenues, some other device had therefore to be substituted for this haphazard appropriation system. This has been done generally by putting the function of preparing the plan for the proposed appropriations in the

hands of an administrative authority, usually, in the case of cities, in the hands of the mayor. He thereupon became charged with the important duty of making the first recommendations with regard to proposed expenditures and, more important still, with making sure that the appropriations provided could be met out of the anticipated revenues of the city for the ensuing year. This statement of contemplated expenditures balanced over against expected revenues is called a budget. Of course the budget, when prepared in this manner, could not go into effect without passage by the council, as the power of actually making appropriations is a legislative power and must be exercised by the legislative organ of government. But if the council was to be left free to alter the budget in any way it saw fit, most of the advantage of an administrative budget would be lost, since the log-rolling tactics would be brought into play as soon as the budget was up for action in the council. In order, therefore, to have all appropriations actually passed by the council and at the same time to exclude the practice of log rolling, the council is limited to reducing or omitting items from the proposed expenditures, but may not insert new ones. This does, of course, constitute a serious curtailment of the power of the council in shaping the general policies of the city with regard to its expenditures, but experience has shown that it is a necessary curtailment. The executive budget system, it may not be improper to add, is the accepted practice in all civilized countries of the world except in our own.

A budget, to be really valuable, should be accompanied by a careful statement of expenditures for the year preceding, prepared in such a way as to show where there are proposed increases and where proposed decreases for the ensuing year. For the same reason, the budget should

be itemized for each department, and the appropriations, when made, should be itemized, in order to insure that the money shall be used for the purposes for which it was intended. This itemization must not be carried too far, for it would unduly hamper the department heads in exercising a desirable discretion; but, generally speaking, it is safer to err on the side of too great itemization or segregation, as it is called, than on the side of too little segregation, which error has in the past not infrequently led practically to getting around the budget control.

Because of the fact that the budget is a fundamental declaration of policy, and the fact that the policy-determining organ of the city government, the council, cannot safely be permitted to express its opinion in the way of increasing expenditures for certain undertakings in which the public might have a larger interest than the budget-making authority, it is extremely desirable and even necessary that ample opportunity be given to the public to become acquainted with the proposed budget before its submission for passage by the council, and to express their opinion as to the desirability of increasing as well as decreasing items. Publication of the tentative budget, in simple, easily understandable form, and distribution to all interested citizens with ample opportunity for the expression of opinions before the budget-making authority, is an essential element in the executive budget system for the city.

After the budget has passed the city council the money is appropriated to the various purposes, usually by departments, and can be drawn out by the administrative officers under proper safeguards insuring responsibility for every cent that is disbursed from the city treasury. Payment is made on warrants or vouchers issued by the officer for whose department the money is appropriated

and approved by a controller whose business it is to see that the order is regular in every respect. The greatest care is necessary in the formulation and enforcement of the regulations covering the actual disbursement of moneys, for a great deal of leakage has occurred in the past at this point through lax rules on this subject.

In order to insure that the administrative officials do not spend more money than is appropriated for their work, it is the universal practice to make any expenditures, except on the basis of appropriations, illegal and the auditor or controller will not authorize the payment of warrants signed by a department head or by the mayor if the amount appropriated for that particular purpose has been exceeded. But that provision does not insure that the administrative officer in charge of the expenditures of a department will take the necessary care to see that his money lasts throughout the fiscal year. If his money is all gone before the close of the year, he may not be legally able to spend any more, but that would mean the cessation of activities in his department. In many cases such a result would be disastrous, as, for instance, in the police, fire, or health departments, and in most of the other work of the city the situation would be intolerable. If now the official cannot legally incur obligations in excess of his appropriations, which should be made part of the law, the only recourse is to have supplementary appropriations, which, if carried to extremes, would practically nullify the advantages of budget procedure. It may happen, of course, that unforeseen circumstances, over which the department head has no control, arise and require more money than could have been anticipated. Long protracted strike difficulties necessitating greater police forces, epidemics of serious diseases demanding extensive public health measures, fires or

other calamities destroying municipal property, may all occur to increase the estimated expenditures. For that purpose an emergency fund should be provided each year in the budget, and the unused portion carried over from year to year and assigned to the various departments by the administrative head of the city government as needed. But those are exceptional cases. The commonest cause of the failure to keep expenditures within appropriations is the lack of care on the part of the department head. This can be counteracted to a considerable extent by providing that the part of the departmental appropriation required for regular current expenses, like salaries and supplies, which are more or less equal throughout the year, shall become available only in monthly installments.

In every well-managed city there is always a considerable amount of money in the treasury for current expenses at the beginning of the fiscal year, as well as special funds for meeting particular obligations, like payments on continuing contracts, interest and principal funds for bonds, etc. These moneys in the hands of the treasurer have, in the past, commonly yielded nothing to the city treasury in interest, though they were banked, and the treasurer derived the benefit, either directly by drawing the interest himself or through favors from the bank in which he placed them without interest. Obviously, the profits from municipal funds belong to the city, and provision should therefore be made for depositing the city funds with the responsible bank which offers the best rate of interest, a practice which can often be made to yield an appreciable revenue to the city.

For the purpose of preparing a satisfactory budget, as well as for the purpose of preventing dishonesty, discovering inefficiency and improving the quality of muni-

cipal administration generally, there is one fundamental prerequisite which has unfortunately been too commonly lacking in American cities, and that is proper municipal bookkeeping or accounting. One of the most helpful means of improving the business administration of a city is an accurate unit system of cost accounting which will show in public business, as it does in private, just what is the cost of each undertaking of the city. A municipal corporation differs from a private corporation, it is true, in that the main emphasis is not to be laid on the question of profit in terms of money returns. But the two kinds of corporations are alike in that neither can be successfully run unless scientific and accurate accounting methods enable the officials to discover at all times just what the various operations of the city are really costing, and just what the financial condition of the city is at all times. One of the chief advantages to be derived from such accounting methods is the possibility of comparing the cost of municipal undertakings in one city with their cost in another. For that purpose, it is apparent that accurate acounting by one municipality is not sufficient, but that uniform accounting by all cities is desirable. This can be attained for all the cities of a given state by requiring uniform accounting methods by general law. There is obviously no infringement of any local freedom in requiring a record of all financial operations to be made in a uniform prescribed manner. On the contrary, cities whose officials might not be inclined to realize the advantages of scientific municipal accounting will profit by having such accounting prescribed by state law.

Mere bookkeeping, that is the proper recording of all financial transactions and conditions, though the fundamental prerequisite, is not enough. Such figures are of little or no value to the citizen who wants to know just

what the city is doing and how much it is costing it at every step in the operations. For this purpose the figures have to be prepared in the shape of reports which show in terse and readily understandable form just what the figures mean. The figures are enough for the auditor who examines the accounts from the point of view of legality or for the official who desires to derive profit from their consideration. But for the public the summary statements and their interpretation are more important. In the light of such reports, campaign statements about money saved and the improved condition of the finances of the city can readily be checked up by the interested citizen, who without them must remain wholly in the dark. Too much emphasis can therefore scarcely be laid upon the importance of proper accounting and reporting methods.

CHAPTER XIII

CONCLUSION

Something has been seen in the previous chapters concerning the nature and extent of the activities which are or should be undertaken by a modern city fully alive to its obligations and possibilities. The primary object of this rapid survey has been to open a horizon for the citizen by acquainting him with the most important aspects of the various phases of municipal administration and showing how large a part of the work of municipal government is really dependent upon the adoption and execution of certain definite policies. In a democracy, such as our cities are supposed to be and all cities should be, the primary task is to discover a vision of municipal efficiency and usefulness which will stimulate and appeal to the citizen. Without the sympathetic interest and coöperation of the great mass of the citizenship, a program of municipal advancement in a democracy is an idle dream. First in importance, therefore, is the prosecution of a campaign of education which will bring before all of the municipal citizenship, in as simple a manner as possible, the great possibilities of good municipal government.

Unfortunately, however, fundamental as is this awakening of the citizenship, that is not all that is needed in

order to put into effect the new ideas even after they have obtained general assent among the mass of urban dwellers, at least for American cities. In almost every one of the chapters, dealing with the various phases of municipal activities, it has been necessary to point out that American cities labored under restrictions of various kinds which interfered with the execution of the most approved steps in municipal progress. The next fundamental consideration, therefore, is to relieve the city of these hampering limitations. The general ideal from this point of view is commonly designated by the term, "municipal home rule," but this term has been so divergently understood, and variously applied, that a somewhat more specific designation of just what is or should be included in that concept, as a goal to be sought after, is necessary.

Municipal home rule, broadly speaking, includes two somewhat different concepts. One refers to the power of the city to choose for itself the kind of machinery it wishes to employ for accomplishing its results. The other has reference to the power to choose what things the city wishes to do. The first aspect of home rule is commonly called the charter-making power. Municipal corporations in this country commonly operate under charters, that is, instruments which determine for the particular city the framework of government under which it operates. Municipal charters, granted in Colonial days by the governors of the colonies, as they were in England by the Crown, came, after the Revolution, to be granted by the legislatures of the states, and acquired thereby the character of ordinary laws. At first, it was the practice to grant separate charters, at least to the larger cities, and there was the possibility of varying the framework of the government to suit

the needs and desires of the individual municipalities.

Unfortunately, the state legislatures soon proved to have little interest in making use of this opportunity to suit local conditions and the power of granting special charters, which also comprised an enumeration of the powers and duties of the city as well as a description of the machinery of government, came to be the source of serious abuse and of the sacrifice of the interests of the cities to the wishes of the controlling powers in the legislatures. Even when legislatures were not intentionally disregardful of the best interests of the cities, the fact that the majority of the legislators came from rural districts, and were quite incapable of understanding municipal needs and problems, resulted in a most unsatisfactory situation. The views which the courts took of the complete subjection of the city to the state legislature made the situation appear for a long time quite hopeless. Several attempts to remedy the situation, such, for instance, as the prohibition on special legislation, requiring legislatures to deal with all cities alike, when not virtually evaded, proved undesirable for other reasons. Not until state constitutions conferred upon cities the power of framing their own charters without control by the legislature did the situation really improve. This power of local determination as to what kind of governmental instruments were desired for a city was the only satisfactory method of meeting that situation. One state after another conferred this charter making power upon cities by constitutional grant, until today more than a dozen states have joined the list, with every prospect that the others will follow sooner or later. It seems obvious that the inhabitants of the city itself are likely to be in the best position to judge what scheme of gov-

ernment is best adapted to their needs. Whether they are or not, it is clear that they are the ones who prosper or suffer, and that they should have the right of framing their own governmental machinery.

Throughout this work but little attention has been devoted to the subject of the governmental machinery, for the chief concern here has been to point out what every city should do no matter what form of government it might be operating under. It is not within the scope of this work, therefore, to go into the question of what machinery is best adapted to carrying out the functions discussed in the previous chapters. It is necessary to point out, however, that while the end is much more important than the means, there may be a vast difference in the ease with which the end is to be accomplished according to whether or not the most suitable means have been employed. In other words, there are some very serious defects in the general scheme of municipal government which has been adopted in this country, which must be charged with a part at least of the failure of American cities to accomplish the desired ends. While there may not be universal agreement as to what form of municipal machinery is best suited for American cities, to enable them to accomplish their ends, there can be little doubt that cities would profit by being free to make a change in their machinery of government if circumstances seem to demand it. The experience of cities which have enjoyed the power of framing their own charters can hardly leave a doubt on the score of the advantages of that system over the former plan of charters imposed by ignorant and indifferent legislatures.

The other phase of the home-rule doctrine, namely, that cities should have freedom in determining what they wish to do, as well as with what kind of instruments they

wish to work, a phase to which reference has been made more than once in the discussion of municipal functions, presents somewhat greater difficulties. Extreme advocates of home rule are likely to assert that cities should have absolute freedom in dealing with matters of local concern. Absolute freedom, of course, involves complete legal powers, and also freedom from any sort of restrictions. American cities have, from the first, been considered as governmental units of strictly enumerated powers. Only such powers as the legislatures expressly conferred could be exercised by the cities. Unfortunately, here also, legislatures were very reactionary, and granted powers to a limited degree only. Almost every new undertaking which a city might think desirable had to be sanctioned by a special legislative grant, either for the particular city, or after the prohibition on special legislation for all cities, or all cities of one class. Much better would it have been had the American legislatures, instead of enumerating in detail everything that cities might do, following the example set by Prussia, for instance, in passing the municipal code, conferred general powers upon cities of regulating all matters of local concern, so long as they did not come into conflict with the general laws or the powers of other governmental authorities. Such a grant would have enabled our cities to get into the line of municipal progress long before this. Substantially, such a grant of powers by constitutional provision is what the advocates of complete home rule desire in the home-rule amendments to our state constitutions.

To give cities full powers in matters of local concern is meaningless, however, unless we know what are matters of local concern. The courts of the United States, influenced by a century and a half of narrow construction

of municipal powers, have not been very liberal in their interpretation of what are matters of local concern. It is neither possible nor desirable at this place to go into a study of the decisions on this point. More important and, indeed, fundamental is the determination of the question: What are the matters of local concern over which cities should be given complete control? If by the term, "local matters," is meant such matters as are solely of interest to the city, and are of no importance to the welfare of the state at large, it may be conceded at the outset that there are no such matters. Every one of the functions considered in the previous chapters has some bearing on the welfare of the larger community. In some cases, such as the enforcement of state laws by the city police, the connection is very close. In others, such as the paving of the city streets, the connection is very slight. But, in every case, some connection exists, and in some of the more fundamental activities of cities, such as education, poor relief, public health, etc., the relation is very intimate. Obviously, then, home rule cannot mean power over matters that are solely of local concern, since there are no such matters. On the other hand, it cannot mean that the state shall relinquish all its power over these matters that are of importance to it as well as to the city, as some extremists on the home-rule question would seem to desire. This would obviously be tantamount to breaking the state up into a host of independent units.

What, then, should be the method of dividing up the relative sphere of state and municipal action in these matters which are of interest to both? The truth of the matter is that no rule of thumb can be laid down for any such division. This fact must be kept in mind, however: no matter how great the interest of the state at

large in these matters may be, the interest of the city is even greater. Anything which contributes to the well-being of the inhabitants of a city is fundamentally a municipal concern. The city should, therefore, have the power to undertake any such activity. The interests of the state can then be preserved by limiting the exercise of that power so far as necessary to preserve those larger interests, with the minimum interference with local activities. But cities have duties as well as rights, not merely duties to their own inhabitants but to the state at large, and the enforcement of those duties is obviously a function for the state government. The German cities, which are so frequently cited as the freest cities in the world, exercise their powers under the strictest kind of state supervision. This supervision is intended to protect private rights against governmental aggression, to insure honesty and efficiency in the city government, and to see that the larger interests of the state are not sacrificed to the interests of the city. This supervision is, however, exercised not through the legislature, as in this country, but through administrative officers. If we are to imitate German municipal practice in according to cities large powers of municipal enterprise, we must not omit the other side of the picture, namely, careful state supervision exercised through administrative officials. Hand in hand with municipal emancipation from the doctrine of limited powers, strict construction, and legislative interference in this country must go the doctrine of efficient administrative control. Every state should therefore have an administrative department for local government through which would be administered the limitations necessary to protect the cities against themselves and each other, and the state as a whole. How these limitations should be applied has already been touched upon as re-

gards such matters as police protection, public health, poor relief, education, taxation and indebtedness. Their proper application must be intrusted to a body of experts, a model for which might be found in the English local government board. The problem, therefore, is not one of choosing between state administration and local administration of these matters, which are of primary interest to the city, but of devising the proper kind of state control over local administration. Only in this way can home rule be realized without the possibility of detriment to the larger unit. Larger powers and a greater measure of administrative supervision are therefore the twin prerequisites to the future development of American cities.

One further question remains to be considered. Even if cities have the necessary powers, financial and legal, for undertaking a comprehensive program of municipal improvement, it is not possible to do everything at once. Any such program must involve for its completion a long period of time. The first practical question that arises, and one which those interested in municipal improvement frequently ask, is: Where should the start be made? Since all improvements cannot be undertaken at once, which should be undertaken first? To this perplexing question a general answer can hardly be made, since cities vary so greatly in their conditions and needs. It is unfortunately true that a great deal of time and energy are wasted on the part of public-spirited citizens interested in improving conditions in their city because they cannot get together on a comprehensive program. Each individual or group of individuals is interested in some particular phase of municipal activity which to them seems all important. Since there is not money enough to go around, each sees in the reform proposals of the others, at least so far as they involve the expenditure

of moneys, a danger to his pet scheme. Instead of coöperating, therefore, these potential forces for good are too often fighting each other, with the consequence that nothing is accomplished. For that reason, it seems desirable to venture upon the hazardous task of outlining very broadly the elements of a comprehensive program of municipal improvement for a city which is lacking in all respects.

Since the fundamental prerequisite to the existence of society in any form is the preservation of law, order and the protection of life and property, it would seem that the first care of the city should be the adequate provision for public safety. This would include the work of the police, fire and public health departments, and they should therefore be the first to be put on an adequate basis. As a necessary condition to accomplishing this end would be the provision of such public improvements as paved and lighted streets, water and sewage works and the machinery of fire fighting. After these elemental needs are adequately met, the undertaking of most concern to the city is probably the provision for public education, since popular government is dependent for its continuance upon an educated citizenship. Then come the numerous and varied activities under the head of social welfare, fundamental among which is the problem of poor relief. Which of the other different phases of social welfare work are to be considered as the most important and pressing will depend so largely on the character of the city that no general statement can be ventured. After all these other matters have been adequately provided for, it is time enough for the city to turn to what might be called its luxuries. Elaborate and expensive municipal buildings, miles of elegant boulevards for automobile pleasure driving, ornamental street lighting, the creation of imposing

civic centers at large expense, are all highly attractive and desirable features of city life. But the very fact that they are so impressive makes it likely that these undertakings will be entered upon while the other more fundamental but less conspicuous needs of the city are still unsatisfied. Beauty is one of the most edifying factors in human development, but a manifestation of beauty to be enjoyed by the few while the many are still suffering from improper housing and indecent living conditions is not a democratic or humanitarian ideal. The chief warning that seems to be needed by American cities in guiding them on their march upward is that until more attention is devoted to the more obscure phases of social welfare work, less money should be spent on the more showy aspects of city improvement. The keynote of the new American city should not be grandeur but democracy, a real democracy of social conditions.

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